

THE MEDICAL NEWS.

A WEEKLY JOURNAL OF MEDICAL SCIENCE.

VOL. LXVI.

SATURDAY, JUNE 15, 1895.

No. 24.

ORIGINAL ARTICLE.

FOUR TYPICAL CASES OF MELANCHOLIA.

Melancholia with Imperative Suicidal Impulses; Melancholia Attonita; Melancholia Agitata; Melancholia with Stupor.

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THE following cases represent the chief varieties of melancholia. The division into the types mentioned is an arbitrary one, as indeed is the classification of insanity in general. It is believed to be the simplest and best. It follows the degree of mental depression more than any other feature. It is not my intention to enter into the questions of etiology or pathology. I simply wish to record an accurate "history" of the cases. These types shade into each other, and cases of one type frequently change their characteristics to those of another. I have tried to avoid much of the obscurity attending minute subdivisions, such as the melancholia religiosa of the Germans and the many forms of suicidal and homicidal melancholia. Any of these types may be associated with destructive tendencies to patients themselves or other persons. These cases do not come into the border-lines on the one side of simple emotional depression and analogous states, such as nostalgia and hypochondria, nor on the other of maniacal excitement. The patients all have the one essential character of "passive suffering, of being controlled and overpowered," and the hallucinations and delusions all have the impress of painful emotional perversion.

CASE I. *Melancholia with imperative suicidal impulses.*—J. S. F., white, sixty-six years of age, a native of Wales, married; is a housekeeper by occupation. The woman is of medium size, the shoulders are stooped, the head of good size and shape, the hair white, the face round, but showing her years. The eyes are dark; there are no iridomotor anomalies; there is marked arcus senilis in both eyes; the tongue is coated and tremulous; the teeth poor and loose from recession of the gums; the ears are large, the hearing normal; the chest is hyper-resonant anteriorly; the breath-sounds roughened, and expiration is slightly prolonged; the second sound of the heart has the accentuated interval between the sounds marked. The circulation is sluggish; the hands and feet cold, and the skin mottled. The abdominal organs

show no signs of disease. The legs are not deformed, though the right ankle is enlarged from a Pott's fracture, the result of an attempt at suicide by jumping from a window. The joint is still stiff, and walking is painful. The reflexes are increased; sensation seems diminished.

The history is, in brief, that after a short period of great depression, during which time she was mute, she attempted suicide by jumping from a window. She had had severe pain in her head for almost three years, and commenced to fear that her mind was becoming affected. She asked her sons to send her to an insane asylum, thinking that there something could be done for her. At that time she says her memory was good, but now she thinks she has lost it entirely. Her attention is sustained, and she is coherent. Her expression is sad and downcast. Three months later she attempted suicide by opening a vein in her arm with a table-knife. The hemorrhage was quite considerable. She was discovered when already unconscious, and the bleeding was checked.

Two months later she attempted suicide by taking "Rough on Rats," but was again saved. She was now closely watched, but one month afterward she tried to kill herself by eating a lot of pins. It is not known how many pins she swallowed, but she passed them in her stools for several days. She seemed to suffer no especial pain from this attempt, and certainly had no serious symptoms.

The woman is voluble and anxious to tell all her troubles. Her manner is respectful, and her attention is only fairly well sustained. She says she is very stupid and useless, and that is why she worries. Her memory has left her of late, and she feels so stupid that she cannot tell whether her arms are clean or not. She is worried because she cannot take care of herself, although really she is very neat and clean. She has no decided delusions of persecution, but thinks some people may have put "a spell" on her. She has no hypnagogic delusions. She says there is no further use in trying to commit suicide, because she cannot accomplish it. She is too stupid even for that. She knows it is wrong to try to kill herself, and usually does not have any such thoughts. At times, however, she says it all comes over her so powerfully that she is driven to it, and cannot resist the impulse. It was in consequence of such imperative impulses that she tried to commit suicide. She is sure she is crazy. She knows it, because she has noticed how her memory is failing, and how stupid she is becoming. So stupid she says she is that she is not competent to take care of herself or even keep herself clean. She says that when she first began to believe that she was crazy she was quiet, and did not wish to talk to anybody. She locked herself up in her house

because it was dirty, and she was too stupid to keep the house clean, and she did not want the neighbors to see it. Sometimes she did not think it was so very dirty, but then she was too stupid to know. She is glad to see her friends, but is greatly troubled because she has lost all love for her sons. This

FIG. 1.



distresses her greatly. She knows she should love them, but when they come to see her she feels like a tiger, and could kill them. She knows she should not treat them so, but cannot help herself, and worries greatly in consequence. She says they have always been dutiful sons and good to her. She asks most appealingly for medicine to help her, and she wants to know whether she can ever be well again, and smiles sadly when told she is improving. The photograph herewith reproduced (Fig. 1) is a good one of her attitude and expression, and also makes a good picture of the general type of depressed mental conditions. Her condition has remained stationary.

CASE II. *Melancholia attonita*.—C. B., thirty-three years old, white, married, a native of Germany, by occupation a domestic, first came under my observation in 1892. Her history previously to that time is embodied in this report. She is of medium height, fairly well nourished, the skin, hair, and eyes dark. There is enlargement of the thyroid gland, slight upon the right side and well-marked on the left. The left shoulder is drawn up, the right depressed; there is a well-marked depression in the supra-clavicular and infra-clavicular spaces. Both saphenæ in both legs are varicose. The patellar reflexes are slightly exaggerated; there is no ankle-clonus. The viscera are normal, the ears and hearing normal, the pupils equal, and respond to light and in accommodation. The cranium is of good shape. The cranial measurements are as follows: Occipito-frontal circumference, 55 cm.; vertico-mental circumference, 57.25 cm.; Binauricular semi-circumference, 32.50 cm.

The family history, so far as mental disease is concerned, is negative. Her father and mother both died of pulmonary tuberculosis. The woman's previous history is that eight months previously she consulted a fortune-teller, and that immediately

after she became profoundly depressed. She was incoherent, and would wring her hands as if in great distress. Her delusions were of a religious nature, and on several occasions she became violent. Shortly after this she became very quiet, and would not speak of her troubles. In consequence very little of any importance bearing on her mental condition could be gleaned from her. She complained of headache, was losing flesh, and was in constant dread of robbers.

On admission she was very reticent. She seemed to know where she was going, and came into the ward with great reluctance. She refused to eat, but was finally induced to take a cup of milk. She was quite docile. She speaks only in German, but understands what is said to her. She gave no indications of violence, and assisted in dressing and undressing herself. Within a few days she refused the liquid food, which had been given her under strong pressure. She asked for water, and when it was given her she said it was poisoned. She also said there was chloroform in her milk. Since that time she has been absolutely mute, refuses food, is irritable, and refuses every attention. On April 5th examination of her urine showed a specific gravity of 1018, with albumin, but no casts present. The total amount was 590 c.cm. Mechanical feeding was now begun. She resisted feeding at first, but afterward became apathetic in that respect also. On July 27th she had developed considerable palpebral and pretibial edema. The urine decreased in amount, and a small quantity of albumin was

FIG. 2.



present. Infusion of digitalis, 30 c.cm., was given hot with her food. On August 22d pelvic examination was made under complete anesthesia. The heart was feeble at first, but improved with the ether. There were no lesions of the vulva or perineum. There was an extensive laceration of the cervix,

extending to the vaginal vault on the right side. The uterus was low, retroverted, and pulled to the right. The right ovary seemed increased, and the left apparently normal in size. The abdominal veins were distended. She was still being fed twice daily. Her manner and expression were pitiful in the extreme. She would stand many hours without the least motion, her chin resting on her sternum. In consequence of the constant retention of this attitude her nucha is permanently stretched. She is absolutely mute, and when moved about she cries quietly. She will not notice her husband or child when they visit her, but is mute even to them. (Fig. 2.) She is not in a condition of stupor, but of profound depression. Her special senses are acute, and she attends to many of her little wants.

This woman eventually recovered, and up to the present writing has not relapsed. The cure seems due to the effect of the digitalis. Its diuretic action was marked, and with increase of urine her mental condition began to clear up. She began by speaking to her little girl once or twice, and later, after nine months' use of the feeding-tube, she began to eat. After this her return to health was slow but constant. She left entirely well, and went to her duties with her husband and child. After her recovery she was very reticent about her past mental state, but she spoke to one of the nurses of delusions and hallucinations horrible in the extreme. The duration of the disease was about twenty months.

The most remarkable feature about this case, apart from the recovery after so severe an attack of mental disease, is the length of time of artificial feeding. For nine months, the longest time within my experience, every particle of food or drink was fed through the tube. The tube was inserted through the nostril and passed well into the stomach. She was fed twice daily, and received at each feeding but one-and-one-half pints of milk and three eggs. The milk was heated to a proper temperature, and the eggs previously beaten up with it. On this diet the patient retained her nourishment, and suffered no digestive disturbance. She passed through a severe endemic of dysentery in the house without being affected.

CASE III. *Melancholia agitata, with delusions of double personality.*—M. C., thirty-five years of age, born in Illinois, single, a domestic by occupation, is of average height, well formed and well nourished. The pupils are regular, and respond to light and in accommodation. The tongue is smooth and pale. She bears no scars or marks of disease or violence. Her pulse is full and regular, and its rate slow. The thorax and abdomen are normal. The patellar reflexes were not well taken.

There is no history of a tuberculous or carcinomatous taint in her family. None of her relatives has been insane, and there is no history of a neurotic tendency. The present illness began a year-and-a-half ago with hallucinations of sound. No cause was assigned as exciting them, and her physical health is said to have been good. She was in great fear of murderers, from whom she would hide in

closets, or run screaming to the street. She also thought she was blamed for killing her cousin. She was wakeful from the noise of the voices that she heard constantly about her accusing her of great sins. Lately they threatened to kill her, as they had already killed her mother and brother. At this time her manner was quiet, self-absorbed, and she was extremely depressed. Once during the last six months she took off her clothes. This was in obedience to voices she heard saying she was to be killed, and that she should prepare herself for it. She was very much ashamed that she had undressed herself. The hallucinations of sound were constant. Her physical condition remained good.

This condition persisted for eighteen months, when she rather suddenly developed the agitated form of melancholia. Since this time she has been in that condition, now about six months. Her emotional excitement and terror seem to be excessive, and her agitation is extreme. She paces the floor, wringing her hands and weeping, tears her hair, and often becomes incoherent. Her delusions and hallucinations are fixed and constant. Her attention is not sustained, and when questioned she constantly interrupts her story to talk to the ever-present voices. She says this is a place of punishment for her, and that she is put here for the terrible crimes she has committed. She must stay here until these are expiated and her enemies are satisfied. She has most painful and harrowing unsystematized delusions of persecution. Her memory for both recent and remote events, but more especially the former, is very much impaired. Her manner has changed, and from being a quiet, well-spoken woman, she has become exceedingly profane.

She has a well-marked delusion of double personality. She conceives herself as being two beings, and it is the privilege of the one continually to reprove and lecture the other. She carries on lengthy arguments with herself, and often comes to blows with herself over them. She tells her tale to her other self, and expects from this other a full measure of sympathy. The greatest reproach one personality can bestow on the other is to call it "crazy." Sometimes she carries on both sides of the conversation, and again she only enunciates one side of it, and the whole sounds like the half of a telephone conversation. She ended the examination rather abruptly. She became very much excited, and then followed this monologue:

"Mary, by God, you are a fool."

"I know it," sullenly.

"Mary, by God, if I were you I would not tell him any more."

"I won't," then turning to me, the second person being represented, she sullenly said—

"I won't tell you a damned thing more."

CASE IV. *Melancholia with stupor.*—A. D., forty years of age, white, a native of Ireland, married, a domestic by occupation, has had one child, which was stillborn after a hard labor and by instrumental delivery. The woman is tall and intelligent-looking, has black hair, streaked with gray, gray eyes, the head of round type, and well-proportioned. The head-measurements are as follows:

Occipito-frontal circumference, 55.75 cm.; vertex-mental circumference, 61 cm.; binauricular semi-circumference, 38.25 cm. The attention is not well sustained on account of her constant fright. Her movements are co-ordinate, and the gestures appropriate. Her heart and lungs are normal. There is a fine fibrillary tremor of the lips, tongue, and fingers. There are no irido-motor anomalies; the pupils are equal, and respond to light and in accommodation. The patellar reflexes are spastic. Three brothers of this patient died as demented. The immediate cause of death in two of them was the progressive physical deterioration attending the disease, "marasmus." The third died of pulmonary tuberculosis, and another brother also died of the same disease. There is said to be no insanity in the generation immediately preceding, but a marked neuropathic tendency in the second generation back, in which there were epilepsy and insanity. The duration of this woman's insanity has been two years.

The patient was brought in very much excited, and apparently in abject terror, begging the nurse not to lock her up. She had a crucifix in her hand, to which she clung desperately. At first, in her extreme agitation, she would allow of no physical examination. In a little while she quieted down. At this stage of the examination her memory seems fairly good. Her attention is not well sustained on account of the constant fright. She herself dates her trouble from many years back, when, she says, she was drugged while living out at service. She implies rather than says that she was drugged for evil purposes by some men. Since that time, she says, she has been constantly pursued by them. They follow her wherever she goes and completely terrorize her. She does not attempt to systematize her delusions, and can give no reasons why she is afraid of them, since they have never harmed her, but she answers all questions with, "Oh, I am afraid." She was constantly afraid these men would come in at night. At intervals in the examination she became extremely agitated, and begged most pitifully not to let the men hurt her. At such times she gasps, and makes convulsive clutches over the precordial region, and her heart beats rapidly and tumultuously with intermitting rhythm. This "precordial fright" (Spitzka) seems to be a constant accompaniment of her paroxysms of terror, and is severe. She says her enemies are many men, but cannot tell whether they are the same men, because she never looks at them. She is afraid they will kill her. When questioned about the drugging she gives no reason for it, and again implies an evil motive. She says that she was only drugged once that she "knows of." She constantly kept her husband with her for fear that he would be arrested; she also feared that some vague, ill-defined harm was coming to him. She convulsively clutches her crucifix and keeps it constantly with her, as she thinks it will protect her from her foes. She says she does not sleep well on account of the men. The last few nights she has been in constant terror; has been awake all night. She saw the men, and heard them talking outside her room.

In the six months following this first observation her condition changed considerably. Her agitation gave way to stupor. She would sit around day after day in an apparently dazed condition. (Fig. 3.) She seemed almost to be living in another sphere, and to be almost completely unconscious of her surroundings. She would not move unless driven by the most urgent physical necessity. She is failing both physically and mentally. The tremor has become coarser and more pronounced. All her special senses seem blunted, and at times almost suspended. She is not absolutely mute, and from the little that can be gleaned from her it is quite apparent that her memory, especially for recent events, has become markedly enfeebled. Although failing bodily, careful examination reveals no disease of heart, lungs, or kidneys. Her handwriting shows the effect of the tremor of her fingers.

FIG. 3.



I saw this patient again one year later. At this time she was greatly emaciated and bedridden. She had then well-marked pulmonary tuberculosis. Both apices were consolidated, and there was a small cavity in the upper part of the right lung. She was unconscious most of the time, and when not so complained greatly of headache. For three weeks she had been subject to cataleptic manifestations, and for three days at the time I saw her she continued in this condition. The muscles were of waxy or "lead-pipe" rigidity, and any position was maintained for hours. She had deteriorated to a marked degree, and was then far advanced in terminal dementia. She died a few weeks later. No autopsy was held. The duration of the disease was three years and seven months.

The Medico-Legal Society of Chicago.—At the annual meeting held June 1, 1895, the following officers for the current year were elected: President, Edmund J. Doering; Vice-Presidents, Cassius D. Wescott and Sanger Brown; Treasurer, Joseph Matteson; Secretary, John Ridlon.

CLINICAL MEMORANDA.

SUCCESSFUL TREATMENT OF A LARGE
CIRROID ANEURISM OF THE SCALP.

BY W. S. FORBES, M.D.,

OF PHILADELPHIA;

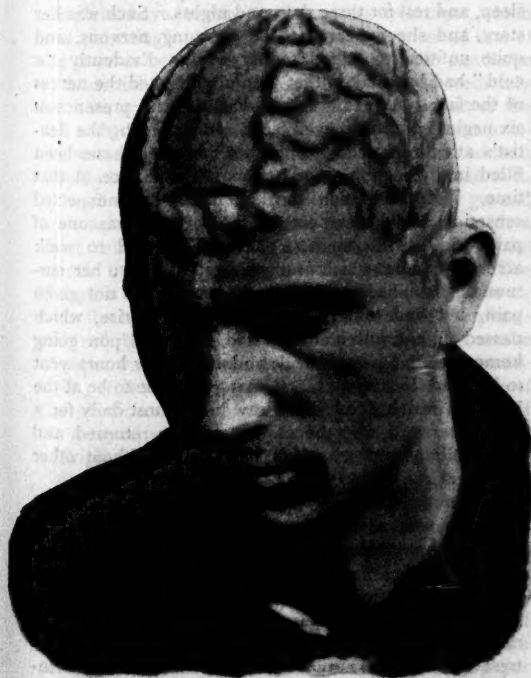
PROFESSOR OF ANATOMY IN JEFFERSON MEDICAL COLLEGE, AND CLINICAL SURGEON TO THE JEFFERSON MEDICAL COLLEGE HOSPITAL.

M. J. T., aged twenty-two years, a carter, entered the Jefferson Medical College Hospital during my term of service, on January 8, 1894. His family history is good; his father and mother are living and in good health, and he has brothers and sisters in good health. His grandfather and grandmother on both sides lived in fair health to beyond eighty years. There is no history of tubercle, of insanity, or of venereal taint.

When thirteen years of age and in good health the boy was struck on the head violently with a "rattan." The blow caused him to stagger. The skin was not torn. A large lump appeared in a few moments. There was considerable pain, which continued for a month, and was increased on handling. The tumor at times contracted somewhat and would then expand. When sixteen years of age he noticed the frontal veins were enlarging, and soon after this the veins on each side of his head and behind began to enlarge and become tortuous, and the expanding tumor began to throb.

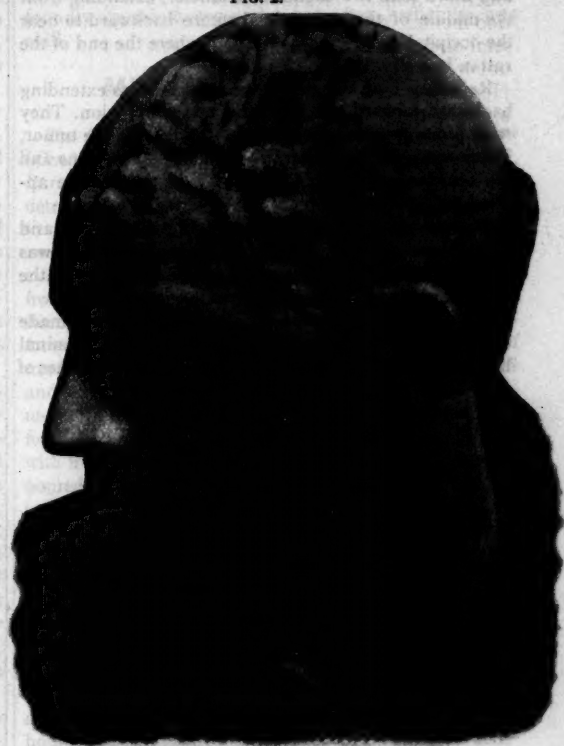
His family states that at this period, three years after the blow on his head, his temper at times was easily aroused and would become violent and beyond control. He became vicious. It is to be noticed that he never drank any intoxicating liquor. Four months before

FIG. 1.



January 1, 1894, two days before operation.

FIG. 2.



January 1, 1894, two days before operation.

entering Jefferson Medical College Hospital, that is, early in September, he fell from his cart and struck his chin, which rendered him insensible for a few moments, but he soon recovered and continued his work. In October he got married, and in two weeks afterward he became violently insane, with homicidal tendencies. He was then taken to the Insane Department of the Philadelphia Hospital, where he remained for five weeks, when he was discharged as improved in his mental condition. He had no recollection of having been taken to the hospital, but in ten days he realized where he was. He had gonorrhea one year ago, but he is now well. He has no glandular enlargement. He has no headache, but has frequent attacks of vertigo. He complains of loss of memory and mental dulness at times. He has constant pain all over his scalp, which is increased on handling it during examination. His appetite is good. He says he is constipated; otherwise his general health is fair.

He has external strabismus in the right eye. The ophthalmoscope discovered large patches of central retino-choroiditis of the right eye and partial atrophy of both optic nerves, but most marked in the right eye.

Examination of his heart showed an accentuated second sound, a thrill near the apex, and diastolic shock, but no aortic or mitral murmur.

The man was put to bed; his constipation, his skin, and his diet attended to, and the hair removed from the entire scalp. Photographs 1 and 2 were taken at this time.

There was a large pulsating tumor, somewhat flattened

and more than two inches in diameter, extending from the middle of the interparietal suture backward to near the occipital crest. It was the spot where the end of the rattan had struck him.

Radiating from the tumor were large veins extending backward, forward, and into either temporal region. They were prominent, tortuous, and pulsating near the tumor. There was a decided bruit in the tumor. The veins and the tumor could be obliterated by gentle pressure applied to the entire scalp.

There were eight arteries supplying the tumor, and by pressure on all of them at the same time there was no pulsation, the bruit could not be heard, and the tumor and the veins became at once less prominent.

The control of the blood-supply was successfully made by acupressure-pins applied to the external terminal branches of the occipital arteries, the terminal branches of

made a complete recovery and has been in perfect health ever since. Photographs Nos. 1 and 2 were taken two days before the operation, and No. 3 was taken sixteen months after the operation.

I am indebted to my assistant, Dr. Hewson, for the notes of the case, and to Prof. Hansell for the ophthalmoscopic observations.

INSUFFLATION OF SODIUM CHLORID INTO THE NASAL CAVITY FOR RELIEF OF PAIN.

By WILLIAM M. CAPP, M.D.,
OF PHILADELPHIA.

By the insufflation of sodium chlorid has been accomplished the entire and immediate relief of acute pain in the face and head in a short series of cases that it may be useful to report. The procedure is simple, harmless, and no more annoying than would be a pinch of snuff, and the medicament is commonly at hand; the effects have been very satisfactory.

In five cases of faceache from decayed teeth, in which the pain did not yield to the usual domestic applications, the pain disappeared at once upon the contact of pulverized table-salt with the mucous membrane of the nose, blown from an insufflator. There were no notable characteristics; the cases were simply such as are daily met among those who do not take proper care of the teeth. The patients were of adult years, two of them men and three of them women.

Another case was that of a woman in middle life, a cook by occupation, always having had general good health, and being strong and hearty of frame. Her face was much swollen and painful, and her condition was pitiable, the suffering having deprived her of food, sleep, and rest for three days and nights. Such was her story, and she appeared to be unstrung, nervous, and quite unfitted to attend to her work. Evidently "a cold" had been taken that painfully affected the nerves of the face. An examination disclosed the presence of six neglected and decayed teeth, sadly needing the dentist's attention. They could not, however, have been filled in the condition of her mouth and face at that time. The insufflation startled her by its unexpected sensation, and her aspect for the moment was one of pain and bewilderment. She was directed to walk across the room, which at once recalled her to her surroundings. She said that the treatment had not given pain, but had taken her by sudden surprise, which passed off, and with it all pain had left her. Upon going home she ate a hearty meal, and after a few hours went to bed and slept all night. Having occasion to be at the house in which she lived, I saw her almost daily for a week afterward, and the pain at no time returned, and the swelling and sensitiveness subsided without other treatment.

In a number of cases of severe headache without regard to cause, relief has been satisfactory and immediate upon the application of this remedy; also in two cases of earache that did not present indications for other special treatment.

A young lady with a furuncle in the external auditory canal presented herself, suffering great pain, with the distress and disturbed nervous condition that usually accompany this painful malady. In the fraction of a minute

FIG. 3.



May, 1895, sixteen months after operation.

each temporal, and the two supraorbital branches of the ophthalmic arteries. The pins were withdrawn in six days. For two weeks no pulsation could be discovered. In the third week, however, after the operation of acupressure, some slight pulsation was observed. I now determined at once to make a crucial incision directly over the scalp and entirely remove the vascular tissue between the skin and the periosteum of the flat bones. Accordingly pressure was made on the several arterial trunks, and the incision made over a large plane of vascular plexus. There was considerable hemorrhage, but this was well controlled by forceps and animal ligatures. The margins of the flap were brought together, proper compression was applied, and over all a wad of sterilized gauze was held in place by a bandage. The man

after the insufflation there was complete relief from pain, and the temporary discomfort from the application, which was attended with great suffusion of the eyes and nose, was deemed trifling by the patient as compared with the complete relief from pain that had before been suffered. There was entire freedom from pain for about four hours, after which it returned, but in much less degree. Subsequent appropriate treatment for the disorder aided in complete recovery, which was reached without any return of the distress endured previous to the salt-insufflation. Some weeks later this same patient applied for relief from the pain caused by the irruption of a wisdom-tooth, which had made her sick and miserable day and night. She elected to submit to the same treatment as before, which was administered, and gave the same prompt and happy result. She slept well that night, and had no return of the pain.

A similar treatment was given to a woman who complained of intense pain in the top of the head. The case was not taken up critically, as at the time temporary relief only was sought, but a partially developed history seemed to point to uterine disease. Immediate relief followed the insufflation of the salt, and comfort, complete and satisfactory, was secured for many hours. Subsequent inquiry showed that when the pain returned it was in much less degree, and other treatment applied to the cause of the trouble removed it. This patient was one who some months before had been promptly relieved of a distressing faceache from a decayed tooth, as previously noted, and did not hesitate to have the treatment repeated upon her.

A fellow-physician during a chance conversation complained of disabling discomfort from eye-strain from over-use of the eyes in reading and work with the microscope. Upon recounting to him some of the foregoing cases he asked to have an application of the treatment, which was accordingly given. His testimony confirmed that of the patients before related. He said that the headache and painful feeling of strain of the eyes immediately left him, and the shock of surprise at the contact of the salt with the nasal mucous membrane, though not painful, was not pleasant, though probably not more so than insufflation of other powder to one not accustomed to it.

In all cases from two to four grains of finely ground table-salt were used in a glass nose-insufflator, with a short rubber tube attached with which to blow by the mouth the medicament into the nasal cavity. The charge is blown just after the patient has emitted the air from the lungs in respiration. In the case of the physician referred to, the insufflator not being at hand, a tube of paper was improvised, and served the purpose equally well. It is worthy of notice that with the exception of the physician none of the patients knew the nature of the material which was applied.

Originality in the use of this mode of treatment is not claimed by me. The first account of its application, so far as I know, is related in the *Edinburgh Medical Journal* for January, 1890, by Mr. George Leslie, as occurring in his own practice. He made a successful use of it in the treatment of obstinate, long-standing, and recent cases of neuralgia, headache, faceache, earache, and toothache, and in bronchial asthma; and recounts that in many cases relief was permanent. The present note of experience is confirmatory of his paper upon the subject. The procedure would seem to offer

a quick relief from pain in a class of cases that profoundly appeal to sympathy, but often baffle the best skill.

MEDICAL PROGRESS.

The Detection of Tubercle-bacilli in Sputum.—AMANN (*Centralblatt für Bakteriologie und Parasitenkunde*, Band xvii, No. 15, p. 513) details the methods for the detection of tubercle-bacilli in sputum that he has come to prefer as the outcome of an experience of twelve years. The sputum is first poured into a strong glass cylinder having a capacity of 100 c.cm., and diluted with from two to four volumes of cold distilled water, so that the cylinder is about half filled. Then 1 c.cm. of chloroform and a small quantity of perfectly clean shot of moderate size are added. The cylinder is tightly closed and actively and continuously shaken for several minutes. In this way the sputum is converted into a perfectly homogeneous solution. It is now further diluted with from four to six volumes of distilled water, and is poured into a specially constructed U-shaped glass cylinder (20 cm. high and 20 mm. in diameter) for the purpose of sedimentation. The caliber of this tube grows progressively smaller, so that it is but 2 mm. at the bottom. To the sputum-solution are added 2 c.cm. of carbol-fuchsin solution, and the two are quickly intermixed by gentle shaking. The apparatus is then closed by means of a rubber stopper perforated through the middle, through which passes a hard-rubber or bone tube. The process of sedimentation is permitted to continue for two days, although sometimes twenty-four hours suffice. The sediment is received into a watch-glass or other receptacle, and a portion is used for a study of epithelium, fibers, and the like, while a second portion is used for the study of tubercle-bacilli. The collected sediment is spread in a thin layer upon several glass slides which are dried at the ordinary temperature, when they are fixed either by careful heating or exposure to equal parts of absolute alcohol and ether. The preparation is now stained with carbol-fuchsin (1 gm. fuchsin is well rubbed up with 5 gm. of liquid carbolic acid (90 per cent.), and 95 c.cm. of hot distilled water added). Of this solution several drops are placed upon a clean slide and heated until the vapor of steam arises. Upon this slide is placed the prepared slide, and the exposure continued until the fluid has cooled. Decolorization is effected by exposure for from half a minute to one minute to a 20 per cent. solution of sulphuric acid saturated with picric acid. The preparation is now washed in water until its acid reaction disappears. It is next treated with a solution of fluorescein 15 gm., crystallized methylene-blue 15 gm., and absolute alcohol 500 c.cm. After the red color has disappeared the preparation is washed with absolute alcohol and then in water. As a counter-stain a diluted watery solution of malachite-green may be employed, to which the preparation is exposed for about a minute, and then washed in water. The slide is now dried and may be studied, or if it is to be preserved, it may be covered with dammar or balsam and a cover-glass.

Floating Spleen in an Infant following Malaria.—PROBEN (*American Journal of Obstetrics and Diseases of Women and Children*, May, 1895, p. 629) has reported the case

of an infant admitted to a foundling-asylum when two weeks old, without any previous history. The child was nursed by a woman who also nursed her own child. The latter thrived well, while the former declined to the ninth month, when it was small, puny, cross, and irritable. At this time the child was given to a hardy, active, strong woman to nurse, whose baby had recently died. This woman had well-developed mammary glands, and an ample supply of milk of good quality, with a good percentage of cream and a fair specific gravity. The child nevertheless failed to improve. Upon physical examination, in addition to symptoms of rachitis, marked local enlargement of the left side was found, which produced a bulging of the abdominal walls anteriorly and laterally, and also of the ribs. Over this swelling the percussion-note was flat throughout an area extending upward as far as the eighth rib, and downward toward Poupart's ligament and toward the median line. On palpation a hard mass could be found extending up below the ribs, and downward into the pelvis behind Poupart's ligament. In the median line a hard distinct edge was felt, notched here and there. There was no pain or tenderness, even with counterpressure in the lumbar region. The mass was movable, and could be rotated slightly for a few inches, though quickly assuming its former position. The liver was slightly enlarged and distinctly palpable at its lower edge, about two or three fingers' breadth below the ribs. Examination of the blood on different occasions disclosed the presence of pigment-bodies, roset-shaped translucent masses, and crescent-shaped bodies. In accordance with these findings six grains of quinin sulphate were given three times a day, alternating with fair-sized doses of arsenic.

The child bore the treatment well. Slight fever that was present soon subsided, while the other symptoms vanished, and the child improved in appearance and weight. The spleen diminished in size correspondingly, although an oval mass of characteristic outline remained, with a distinct hard edge, not notched, convex on its surface, not tender or painful, lying loose in the abdominal cavity to the left of the umbilicus, partly in the lumbar and inguinal regions. The viscus could be gathered up between the fingers, and was freely movable to the left and upward for a distance of two or three inches. There was an absence of the flatness beneath the ribs in the lower axillary region, where the spleen is normally situated. The tumor was about double the size of the normal spleen, and owing to its weight had evidently loosened itself from its attachments, and was floating about the abdomen.

THERAPEUTIC NOTES.

The Treatment of Diphtheria with the Antitoxin.—GOU-
GUENHEIM (*Annales des Maladies de l'Oreille, du
Larynx, du Nez et du Pharynx*, 1895, No. 5, p. 440) reports the results of the use of the antitoxin in the treatment of diphtheria at the Hospital Lariboisière. Prior to the institution of the new treatment, in October, 1894, there had been observed 135 cases of diphtheria in adults, with 14 deaths (10.37 per cent.), and 40 in children, with 23 deaths (57.5 per cent.). Of 77 adults treated with the

antitoxin 3 died (3.9 per cent.), and of 48 children 9 died (18.75 per cent.). In 12 of the children, despite characteristic appearances, the bacillus of diphtheria was not found, but only streptococci. One of these children died after tracheotomy. In 10 cases only diphtheria-bacilli were found; 2 of these died. In 16 cases diphtheria-bacilli and streptococci were found in association; 1 of these died. In 1 case diphtheria-bacilli and colon-bacilli were found together. Five cases presented multiple associations. Of the whole number tracheotomy was performed in 4 cases, and of these 2 died. Among the cases of adults 12 presented only streptococci; 1 of these died after tracheotomy. Thirty presented diphtheria-bacilli, and only 1 of these died. In 33 diphtheria-bacilli and streptococci were associated; 1 of these died.

SIEGEL (*Münchener medizinische Wochenschrift*, 1895, No. 21, p. 507) relates that between 1889 and 1893 the mortality from diphtheria in the Olga Hospital, in Stuttgart, averaged 40.1 per cent., and among cases requiring tracheotomy 63.3 per cent. During the year 1894, up to October 4th, when the antitoxin was first employed, the mortality reached 50.3 per cent. and 70 per cent., respectively. In one-hundred cases treated from October 4, 1894, to January 1, 1895, with the antitoxin the mortality was 12 per cent. and 20.3 per cent., respectively.

The Treatment of Gall-stones with Large Doses of Olive-oil.—STEPHENSON (*British Medical Journal*, No. 1795, p. 1144) has reported the case of a woman, forty-eight years old, who presented herself in an attack of biliary colic. She was suffering from acute pain, situated over the hepatic region and extending to the right shoulder-blade, accompanied by severe retching and vomiting and collapse. The pain was relieved by hypodermic injections of morphin. The attack was followed by well-marked jaundice, which, however, passed off in a few days' time. There was a history of similar attacks at various intervals for upward of four years, and these were invariably followed by slight jaundice. The stools were examined for gall-stones, but none was found. Two months later the woman was again seized with a severe attack of colic, but careful search failed to detect any trace of gall-stones in the stools. These attacks continued, at intervals of from three to six weeks, for nearly five months, although the patient was constantly under treatment, and all the usual remedies were tried without avail. In no instance was a gall-stone ever found in the stools. The last attack was particularly severe and protracted, and cholecystotomy was advised. Before operating, however, resort was had to large doses of olive-oil. Accordingly, three grains of mercurial pill were given at bedtime, and followed on the next morning by three ounces of olive-oil, the patient being instructed to lie upon the right side. The oil was given in tablespoonful-doses every three hours during the day, and in the stools six large gall-stones were found. Two measured nearly half an inch and were faceted. No pain was experienced during the passage of the stones, nor did the oil cause much nausea. The jaundice passed off in a few days, and the patient made a complete recovery, for twelve months afterward having no attacks of colic.

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SATURDAY, JUNE 15, 1895.

THE DISEASES OF THE MYOCARDIUM.

WE recall with interest the lectures of PROFESSOR DA COSTA, delivered about a year ago, on the subject of weak heart, in which he detailed the etiologic relations and clinical features of certain cases of failing circulation due to disturbances of the heart's action. These studies did not deal with anatomic conditions, but rather with the results, the outward manifestations or symptomatic display in cases in which the underlying structural or vital disease could only be a matter of conjecture. DA COSTA would include among his cases instances in which there is muscular weakness and others in which the neural control is impaired. Other investigators have approached the study of cardiac pathology rather from the anatomic point of view, studying and describing the morbid lesions of the muscular and other parts of the heart. Sooner or later, no doubt, the exact relations of the structural changes to the clinical manifestations will be established and the knowledge of cardiac pathology will be placed upon a basis of scientific accuracy impossible at present. A retrospective view of the whole subject even now will indicate how great and rapid has been the accumulation of more exact knowledge, and in particular

how conspicuously the myocardium has come to occupy attention.

The tendency of the day is toward the establishment of anatomic lesions in all cases of functional derangement; and such terms as weak muscle, idiopathic weakness, or the like are scrutinized with greater care and accepted with greater hesitation than was ever before the case. It is not impossible to conceive that a heart may be inherently weak and unequal to cope with extraordinary demands, whether arising from surrounding conditions acting mechanically or from disease; but we are slow today to admit such weakness until every possible form of organic disease has been excluded. The older investigators in particular were prone to speak of such inorganic myasthenia, but the regularity with which structural defects are found by modern methods of research has materially lessened the horizon of mere functional weakness, and will doubtless continue to do so more and more. It is particularly to the credit of KREHL and of ROMBERG that this is so. The necessity urged by these writers of making systematic sections of all parts of the heart is amply illustrated by the discovery of small and localized, yet doubtless important, lesions in cases in which a superficial examination would have failed to discover changes of any kind. It is scarcely necessary to call attention to the serious consequences that might result from a focal lesion in one of the papillary muscles or at the base of the valvular attachments, yet how easily might such a lesion be overlooked unless careful, systematic examination were made in every case.

The morbid changes themselves are widely varied, and but little definite knowledge can be claimed regarding their special results. In a general way, it may be asserted that myocardial degenerations or inflammations weaken the cardiac power; but pathologists have been heretofore so busied with the determination of the lesions themselves that little can be said regarding any variations in the effects of the different forms.

VIRCHOW headed the way for exact knowledge by his first descriptions of myocarditis, and, though more modern pathology recognizes in his "parenchymatous myocarditis" rather degeneration than an inflammation, his work in other respects still retains its original importance. The older writers had, it is true, spoken much of carditis, but little definite knowledge was established, and the term was so vaguely applied as to make it difficult at this day

to determine what lesion was really observed or referred to in many cases. The more accurate studies of the parenchymatous degenerations date from the contributions of ZENKER. In a general way, it has since been recognized that granular and hyaline degenerations of the muscle-fibers are sometimes results of fever and infection, but it has remained for comparatively recent years to establish the frequency of these lesions, and especially the great number of infections liable to be so complicated. In other words, while it was recognized as a pathologic fact in various severe fevers that myocardial disease might arise, the frequency of this association was scarcely conceived, and its clinical importance was rarely taken into account. To-day it may be asserted that few cases of severe infectious disease run through their entire course without some degenerative or inflammatory disease of the myocardium. Not rarely this may profoundly influence the clinical course, and, more commonly, perhaps, than we yet suspect the subsequent health and vitality suffer deterioration. Other and rarer acute degenerations than those referred to have been described, but none of them appears to be of great clinical significance.

One form, however, merits notice from its striking character as well as from the attention devoted to it in recent years. This is the segmentation of the fibers first described by ZENKER, and more recently studied by RENAUT and LANDOUZY, who speak of it as *myocardite segmentaire*, and by RECKLINGHAUSEN and others. This has been found under a variety of circumstances, the most striking of which is sudden death, in which the peculiar fragmented state of the muscle-fibers (a solution of the cement-substance) not unnaturally suggested to some investigators the thought that the disorganization of the muscle played a part in the sudden fatal issue. RECKLINGHAUSEN, ZENKER, and recently OESTREICH and GUTTMANN, regard this change as purely agonal or post mortem, but others have asserted with apparent reason that its occurrence in some cases and its absence in others betoken a pre-existing vital or chemic weakness in the former cases, even were the view of its agonal occurrence sustained by positive proof. However this may be, the condition is one of greatest pathologic interest and adds another evidence of the complexity of cardiac pathology.

Of the more gradual and chronic degenerative conditions fatty heart has been long recognized, though confused with other conditions. With it may be associated interstitial fibroid myocarditis

and various forms of vacuolation and atrophy of the muscle-fibers. The association of fatty degeneration of the heart with various cachectic conditions is well established; the conditions under which combined fibroid disease and fatty degeneration occur are less clearly defined. That cases of this character have been mistaken for simple hypertrophy of the heart was evidenced by QUAIN'S study of a much-enlarged heart at St. George's Hospital, which had been regarded as an instance of pure hypertrophy. It is needless to indicate the essentially different effects of these conditions upon the cardiac power. Every clinician of experience has doubtless seen cases of considerable enlargement of the heart, with evident failure of its power, either associated with arterio-sclerosis or without this, in which no amount of careful inquiry or investigation into the previous history or the state of the patient revealed an explanation of the cardiac disease. Very often these cases are put down as idiopathic hypertrophy and dilatation. Most of them, however, are not purely hypertrophy and dilatation; evidences, though slight, of interstitial myocardial change are found on systematic study of the heart, and the suggestion that some old-time and apparently trivial infection may have set on foot acute endocardial lesions, which eventually led to sclerotic changes, may be entertained. It must be the part of future investigation to determine how far such acute processes, themselves passing without marked symptoms, may operate to this final event, and how far such obscure lesions may account for the occurrence of what we are still accustomed and constrained to speak of as essential weakness of the heart, heart-strain, and the like.

Of equal interest with the study of the pathology of the heart's muscle in cases of purely muscular disease is the investigation of its rôle in valvular affections. Notwithstanding the fact that as old an observer as STOKES recognized and clearly indicated the great importance of a healthy muscle in valvular disease, and despite the fact that our treatment of cases has been based upon the stimulation of the heart-muscle, writers have ever dwelt with particular emphasis upon the mere mechanic problems. However much a valvular defect may mechanically contribute to circulatory disturbances, the infinitely more important questions are the ability of the heart-muscle to compensate for the valvular disorder and the exact character of the lesion or lesions capable of producing this loss of power. The

studies directed to the heart-muscle in valvular disease are, therefore, all-important, but have hitherto been concerned with chronic cases only. Of late, however, and most particularly in a recent contribution of ROMBERG (*Deutsches Archiv für klin. Med.*, June 26, 1894), attention has been called to the lesions of the myocardium in acute myocarditis. It cannot fail to strike the observer that in instances of verrucose endocarditis, in which the local lesion seems so trivial, the failing circulation is often disproportionately marked. This has been ascribed to reflex nervous disturbance, to inflammatory irritation, or the like; but such explanations are scarcely satisfactory. We are interested, therefore, in the studies of ROMBERG, which appear to throw the first distinct light upon the real nature of the cardiac disturbance. His investigations, it is true, have been confined to but two or three cases, but the results were striking. In each there was found a certain degree of myocarditis, especially marked at the auriculo-ventricular junctions and at the bases of the valvular attachments, where but a moderate degree of disease will be seen to have the power of exciting most marked disturbance of the function of the organ. But, more important than this, was the discovery of hyaline thrombosis in a large number of the small arteries of the myocardium, a lesion that might conceivably be far-reaching in importance. The short duration of these cases doubtless prevented further results, but if these lesions are confirmed by other investigations there is found an explanation of what has always been a doubtful question in cardiac pathology.

The physiologic importance of the intra-cardiac nervous ganglia is still a matter of great question, and the significance of morbid changes discovered in them can scarcely be determined. A number of observers, as PUTJAKIN and OTT, have described such lesions, occurring either alone or in association with grosser alterations of the myocardium; but, beyond the general suspicion that such lesions may occasion serious disturbance of the heart-action, nothing of a definite nature may be asserted.

We have thus hastily and imperfectly indicated some of the lines along which increasing knowledge has accumulated, and if there is much vagueness in what we have said, our justification is found both in the lack of knowledge and in the advantages of this feeling of vagueness itself. We would make ourselves perfectly clear on this point. So long as it was

held and taught that cardiac pathology comprised certain definitely known valvular lesions, supposed to act in a mechanical way, and other cases in which a gross disease of the muscle itself deranged its action, and still others in which inherent muscular weakness or loss of nerve-control determined the loss of cardiac function, so long the wheels of progress were locked from the very definiteness of knowledge or theory. It has, however, very fortunately been the province of recent investigation to cast a deep shadow of doubt upon the proportion of importance to be ascribed to the mere mechanical effects in the first group and upon the essentially functional character of the cardiac weakness in the last. The less conservative investigators of recent years have tended more and more to a complete denial of such conditions as inherent muscular weakness, and to the assertion of the view that definite organic changes might be detected in every case in which systematic study had been made. While these latter claims have fallen far short of positive demonstration in many cases, they have served to render less positive the older beliefs, and have established a wholesome feeling of doubt regarding the entire question of myocardial disease, which has stimulated investigation and must continue to do so hereafter. The clinical recognition of the effects of sudden or prolonged heart-strain is very important, but it is vastly more important that it should be recognized that there may be, and probably are, underlying structural changes that predispose to untoward results of strain or result directly from it. It is in this direction that recent investigation regarding myocardial disease has been suggestive, and it is in this direction that further results are likely to be found.

EDITORIAL COMMENTS.

The Home-care of the Sick.—At the Third Annual Sanitary Convention of the State of California, recently held at San Francisco, DR. S. O. L. POTTER (*Pacific Medical Journal*, vol. xxxviii, No. 5, p. 265) made an earnest plea for suitable provision in the construction of the houses of the well-to-do for the care of members of the family stricken with disease and requiring isolation. As is aptly pointed out, rooms are set apart for reading, smoking, billiards, and other forms of entertainment, as well as for guests; but, as a rule, no thought is given as to the possibility of illness and the requirement of a special department for the invalid. Under existing circumstances, patients suffering with infectious diseases, and more especially those that are contagious, cannot receive that disposition and care in their own homes

that is possible in a well-organized general or special hospital; but if suitable provision were made in the construction of dwellings, the risks and unpleasantness of removal to a hospital in cases of this character would often be avoided. As Dr. Potter states, such a sick-room or suite of rooms should ordinarily be located on an upper floor, suitably warmed, and, if possible, in the southeast corner, so as to obtain the best sunny exposure. It should be separated from other rooms on the same floor by halls with windows at either end. The floor should be covered with matting to deaden sound; a water-closet and bath-tub should be convenient, emptying not into the public sewer, but into a special receptacle capable of being easily emptied and disinfected. The furniture should be of the simplest and most inexpensive character, so that it may be thoroughly disinfected or destroyed. Adjoining the sick-room proper should be another for the nurse or attendant, with facilities for preparing necessary diet, and attending to various other matters of related character. The invalid's room should be approached through an ante-room, in which the physician can make necessary changes in his clothing and perform ablution or disinfection after his visit. Provision should be made for perfect ventilation and adequate control of light. The room or rooms set apart for the purpose herein indicated should not be used for other purposes, in order that they may be in constant readiness should they at any time be needed. The plan outlined can be modified in many ways to adapt itself to the means and circumstances of the individual patient. In any event, such preparation for disease in time of health would relieve the management of an attack of illness of much of the embarrassment and difficulty that now attend it.

The Children's Seashore House at Atlantic City.—It is but too well known that the high mortality among children during the summer is due principally to the heat, the food, and the surroundings, and it is among the poor that these conditions are at their worst and are most oppressively felt. Any measures by which these evils can be escaped may be calculated to prevent disease, to save life, and to aid recovery. Among the noble institutions of our city is that known as the Children's Seashore House at Atlantic City, from whose annual report for the year 1894 it appears that during the one-hundred-and-seven days in the course of the heated term that the institution was in operation there were admitted 1096 children and 261 mothers, the aggregate number of days for the former being 12,452, and for the latter 2251, averages of 11.3 and 8.6, respectively. The daily average number of children was 116, and of mothers 21. During the month of June, in response to an offer to receive free of charge all of the poor bed-ridden or crippled children in Philadelphia, 96 came from nine different hospitals and other public institutions. Similar provision has been made for the month of June of the current year. It may be interesting to note that the institution is the first of its kind in the United States, having been opened as a small cottage in 1872. In the twenty-three years of its existence it has gradually increased its capacity, until now it has accommodations for about 125 children and 30 mothers.

The work of the undertaking has outgrown its capacity, so that it has become necessary either to enlarge the

existing accommodations or, what seems the preferable plan, to dispose of the present valuable property and purchase elsewhere a larger area at smaller cost.

The object of the institution is to furnish at a nominal cost to children of the poorer classes suffering from non-contagious diseases or the debilitating effects incident to the hot weather and crowding in the city an opportunity to avail themselves of the invigorating sea-air, in conjunction with good nursing and medical attendance. Children over three years of age are cared for by competent nurses in the wards, and, in order that young children may not be separated from their mothers, small cottages have been provided for these. Provision has also been made for somewhat older boys and girls, and for young women.

A Case for the Criminal and Postal Authorities to Consider.—We have before us a circular ostensibly issued for the benefit of the medical profession, with references to banks and to various medical journals, to give the concern seeming financial and medical authority, in which, by the aid of a patented contrivance, the profession is instructed in all the minutest details of the method of carrying out abortion. With other intimations, the ignorance of the most common principles of spelling (even spelling-reform spelling!) and of English grammar, exhibited in the circular, shows plainly the scientific and humanitarian motives that fathered it. The patented device, price named, pictured and described, is, of course, an absolute prerequisite for the abortionist. The dangers of abortion by any other method are described, but with this instrument, we are informed:

"Any case of abortion in which an operation is admissible may be brought to a finish within an hour, often in a few minutes. In the hands of the average doctor it is possible to detach, demolish, and extract the ovum with little danger or suffering, beginning the operation with an os that will only admit the little finger. It may be pressed into any size or shape desired, as small as the beak of a uterine sound or as large as the head of a three-months' embryo. Each instrument is a curet or snare as desired, and is covered with soft rubber, which makes them (*sic*!) practically harmless. When this operation is understood and established abortions will be dispatched with the same promptness as labor.

OPERATION: Pass the speculum. Strict antisepsis observed in every particular. Introduce a dilator and stretch the cervix. In accidental abortion requiring instrumental management the os is either dilated or easily dilatable. The exception to this rule will be noted further on. Fix with thumb-screw and immerse the staff in antiseptic. With this instrument thus adjusted you detach and demolish the ovum. It is detached by scraping the walls as you would a mortar with a thin spatula. It is then demolished by churning the uterus in every direction, using enough force to penetrate the ovum, and not the walls of the uterus. This is easily done," etc.

An Important Conference on the Bacteriology of Drinking-water.—Arrangements have been made, under the auspices of the American Public Health Association, for a conference of bacteriologists and chemists interested in water-analysis. The meeting will be held in New York City on June 21st and 22d, and will be devoted to formulating, as far as possible, uniform methods for determining the number and nature of microbes in water. In all departments of practical analysis it is now recog-

nized that strict uniformity of method must be adopted if concordant results are to be obtained and unseemly contradictions in expert opinions avoided. Such a system has been in successful operation for years in various departments of agricultural and engineering chemistry. In no analytic work has there been more necessity for some agreement than in the bacteriologic examination of drinking-water. The existing methods have been rapidly developed and applied by persons unequally qualified. The result has been a confusion of inferences, and, moreover, a temptation to superficial inferences which have wrought much harm in sanitary chemistry.

The conference will endeavor to decide on the best methods of preparing culture-media, of cultivating and isolating microbes, and will go into the questions in much detail. It is probable that whatever agreement is reached will be formulated and published, with the hope that all sanitary chemists may subject its methods to trial and report their opinions and suggestions for improvement.

We anticipate excellent results from the plan, for in no field of applied science has the "little learning" been more dangerous than in the study of the bacteriology of drinking-water.

SOCIETY PROCEEDINGS.

AMERICAN SURGICAL ASSOCIATION.

Annual Meeting, Held at New York City, May 28, 29, and 30, 1895.

(Concluded from page 654.)

SECOND DAY—MAY 29TH.

DR. HUNTER MCGUIRE, of Richmond, Va., read a paper on

THE OPERATIVE TREATMENT OF CARCINOMA OF THE MALE GENITALS.

One case of carcinoma of the penis will be found in about one-hundred cases of carcinoma, the disease making its appearance usually after middle life, appearing between forty-five and seventy years of age. It attacks at first the inner surface of the prepuce or glans penis, more commonly the latter. It begins as a small vesicle or nodule, which soon breaks down, leaving an ulcer with densely hard base and edges. Involvement of the glands is probably more common than is usually believed—having been found in forty cases out of forty-eight. The average duration of life in cases not operated on is given as twenty-two months. As soon as a diagnosis is made radical measures should be advised. Syphilis is the only disease with which carcinoma of the male genitals may be confounded. The appearance of the ulcer, covered with dead epithelium and very hard-based, the induration extending some distance around, but intense, and with its limit ill defined, will generally tell the character of the malady; if not, the microscope will decide. If phimosis exists, as it often does, and is often responsible for the new-growth, the prepuce should be split, to allow of complete inspection. The prognosis in early operation is good; after some delay, especially if iodid and mercury are used constitutionally, the prognosis is bad, and after still further delay and glandular

infection it is almost if not quite hopeless. Amputation of the penis by the galvanic cautery, or by the *écraseur*, is not to be recommended.

In carcinoma of the scrotum the operation must be a radical one. All of the diseased part must be removed with the knife; if one testicle is involved, it too must be sacrificed; if the glands in the groin are enlarged and indurated, they should be removed. If the disease returns, a second, or even a third, operation should be performed.

The medullary form of carcinoma is the one most commonly found to involve the testicle. The average duration of the disease is about two years. Jacobson gives the following points of diagnostic value: 1. Continual, progressive, solid enlargement without inflammation. 2. Unequal consistence of the swelling at different parts. 3. Absence of translucency. 4. Tendency of the scrotal veins to become enlarged. 5. Increasing aches and painfulness. 6. In doubtful cases antiseptic tapping or exploratory incisions, preferably the latter. 7. Enlargement of the cord and, *à fortiori*, of the lumbar glands.

The danger to life in castration for carcinoma is very slight. The permanency of cure is uncertain. Still, life is prolonged and the patient made more comfortable. When the disease has progressed so far that secondary masses can be felt in the iliac fossa or in the lumbar region, and especially if cachexia is marked, the operation should not be performed, no matter how urgently the patient may demand it.

The symptoms that should induce the surgeon to suspect hard carcinoma of the prostate, and to distinguish it from prostatic hypertrophy, may be stated briefly as follows: 1. Frequency and difficulty of urination are great, and urgency of call more imperious than can be accounted for by the size of the prostate or by the amount of residual urine. 2. It is difficult, often impossible, to introduce a metallic sound into the bladder through the warped urethra. 3. Continuous pain in the pelvis, often extending to the thighs and legs. 4. Blood sometimes precedes or follows the stream of urine. 5. The prostate is enlarged, as hard as stone, and the finger in the rectum can often detect induration of one or both vesiculæ seminales.

Soft carcinoma is not so easily diagnosed, and usually progresses very far before its presence is suspected. At first the symptoms are rectal, the patient has frequent calls to empty the rectum, there is tenesmus, and the stools contain blood and mucus; secondarily, there is frequency of micturition, with incontinence or retention. Rectal examination detects a large, soft, elastic tumor springing from the prostate, pushing backward into the rectum, eventually breaking into that organ and filling the pelvis. If necessary, the bladder should be regularly emptied by a catheter in cases of complete or partial retention; the rectum should be unloaded by enemata, and the stools kept soft by laxatives by the mouth. In some cases in which the rectal symptoms are distressing the formation of an artificial anus by colotomy may be effected with advantage.

No radical operation for the permanent cure of carcinoma of the prostate has yet been devised. Suprapubic cystotomy and drainage give physiologic rest to the bladder and immense relief in these cases. When the bladder has been opened by the simple suprapubic

incision the diseased prostate can be thoroughly examined by the finger introduced into the bladder, or a small electric light introduced through the suprapubic opening permits of complete inspection of the vesical surface of the growth.

A case of suprapubic artificial urethra for hard carcinoma of the prostate was mentioned in which the patient wore for a year a silver plug to prevent the tract from closing, and when the urine accumulated in the bladder the plug was withdrawn and a soft-rubber catheter introduced. When the water had all escaped the catheter was taken out and the plug replaced. Thus nearly all the pain and frequency of urination were avoided. Pain in the pelvis and legs, and other symptoms of carcinoma, continued until death.

AT A CLINIC AT THE NEW YORK HOSPITAL,

DR. ARPAD G. GERSTER reported a case of deformity of the fibula, which was very much reduced by operation, and in which the fibula was as thick as the tibia should be. A second case was that of a young girl in which tumor of the brain was diagnosed, and in which, after operation, a gold plate was inserted and worn for two-and-three-quarters years. At the end of this time the symptoms returned, and the skull was again opened, and when the plate was removed a secondary growth—sarcoma—was found. A third case was that of a young man in which castration had been performed, and in addition the entire cord and seminal glands extirpated. The patient recovered and was out of bed in a very short time.

DR. WEIR presented several cases, one of which was in a patient in whom the deformity due to a sunken nose had been admirably corrected. The second was a case of compound fracture of the skull, in which trephining was practised and a silver plate inserted. The third and fourth were in young men with tuberculous testes on both sides, in each of which an artificial testis was inserted. The fifth case was in an old man who had suffered from prostatic trouble, which was somewhat relieved by operation. The sixth showed the good results of operative interference in a case of dislocation of the elbow. The seventh was a case of fracture of the external condyle, and the eighth was in a boy who had complained that one of his testicles had not descended.

DR. WEIR read the notes of a case in a woman who presented sarcoma springing from the posterior wall of the stomach. The patient was operated on, and did very well.

DR. ABBE produced several patients: one of general peritonitis, in which recovery followed operation; another, of jugular thrombosis, in which operation had been performed seven weeks before, followed by uninterrupted recovery; several cases of tumor of the brain, one of esophageal stricture, and one of tumor of the kidney, all of which were much benefited.

DR. ARPAD G. GERSTER showed a case in which very extensive extirpation of the rectum was performed on November 18, 1884. The man had an artificial anus, and the case is interesting from the fact that plastic operations had to be performed in order to open up the anus of each of the patient's first two children, although the anus of a third child was normal.

DR. HOMANS stated that he had had a very similar case.

DR. WILLIAM T. BULL presented a case in which gastro-enterostomy had been performed for the relief of typical symptoms of pyloric obstruction, four years and nine months ago, with a good result. Another case illustrated beautifully what may be accomplished by skin-grafting, and a third case was mentioned, and a photograph shown, in which skin-grafting had also been successful.

DR. MURRAY showed a case of tumor of the tongue and one of disarticulation of the hip-joint for carcinoma, both of which were much benefited by operation. He also showed a specimen from an aneurism from the circle of Willis which he had recently removed from a man thirty years of age, and which was due to an injury received from a fall.

AT A CLINIC AT THE ROOSEVELT HOSPITAL,

DR. LANGE presented two cases of suppurative disease of the middle ear: one of a man with tuberculous disease of the kidneys, bladder, and prostate, in which it was necessary to extirpate the kidney; one of a woman with disease of the ureter, after the removal of which she gained forty pounds. He also showed a case in which two tumors of the broad ligament had been removed, after which the patient gained 130 pounds. The last case was in a patient with tuberculosis, who had been to several hospitals, and the diagnosis of carcinoma had been made on account of the large number of small masses scattered around over the surface of the breast. The bottom of the breast was removed, the operation being a great success.

DR. FOWLER showed a case of dissection of the extensor tendon of the middle finger of the left hand, which had been torn loose from its aponeurotic structure in the course of playing upon a violin. After operation the patient was able to carry on his vocation as a professional violinist. A second case was one of rupture of the tendo Achillis, which was sutured five months after the accident, and as a result the patient was able to walk without a perceptible limp. A third case was in a man seventy-one years of age, who had ruptured the patellar attachment of the quadriceps extensor of one leg, and six months later met with a similar accident with the other. The muscle was sutured, the functional result being excellent and union perfect. A fourth case was in a man who had suffered for thirteen years with facial neuralgia, and in which a successful operation was performed for its relief. The last case was in a little girl who had suffered from a deformity of the auricular appendages, which was remedied by transplantation from one side to the other.

DR. RUSHMORE showed a case in which the deformity due to the head being drawn down to one side was remedied; and one in which complete dislocation of the right knee had occurred. Upon admission the second patient complained of severe pains in the hip, and upon opening the joint the dislocation was reduced. Shortly afterward, however, there was a displacement, and a second operation was necessary. At present the man has a perfectly useful limb, has all the motions of the hip-joint, and there is but one-and-one-half inches of shortening.

DR. CHARLES MCBURNEY presented a man who had been thrown from his horse while hunting, the horse falling on him. The bladder was forced out of position,

and a large incision was necessary in order to locate it. It was also found that an extensive fracture of the pelvis had occurred, and the pelvic cavity was full of urine and extravasated blood. The fractures united, and the bladder resumed its functions, it being possible to pass a No. 29 without any trouble.

The next patient illustrated the results of operation for malignant disease of the left tonsil. The tonsil and all the adjacent tissue were removed, including a piece of the soft palate. The patient has remained entirely well since the operation.

The third patient was a young lady, who had been operated on for a spindle-cell sarcoma at the lower end of the radius, and in whom a part of the radius was removed.

The next case was that of a boy who was suffering from the effects of a thirty-two caliber ball, which had entered the thigh behind the femur. Ten days after the accident a pulsating tumor was noticed in the popliteal space, which was dissected out, and primary union took place, since which time there has been complete flexion.

The fifth patient suffered from rupture of the quadriceps extensor, and about eight months afterward he ruptured the extensor on the other side. The muscles were sutured, with primary union and complete restoration of function.

The next patient was operated on in December, 1893, for otitis of the lower jaw. The case is interesting on account of the spiral spring which the speaker inserted to prevent deformity.

The next case illustrated the result of operation for recurring appendicitis. Dr. McBurney stated he had operated on thirty cases of this affection without a death. One of the principal points about the operation is the very small opening that is made, a large opening not being necessary. The last case was very similar to the preceding. The scar in this case was extremely small.

THIRD DAY—MAY 30TH.

The following officers were elected for the ensuing year: *President*, L. McLane Tiffany, of Baltimore; *Vice-Presidents*, Christian Fenger, of Chicago, W. H. Carmalt, of New Haven; *Secretary*, M. H. Richardson, of Boston; *Treasurer*, N. P. Dandridge, of Cincinnati; *Recorder*, De Forest Willard, of Philadelphia.

The next meeting is to be held at Detroit; Dr. T. A. McGraw was made Chairman of the Committee of Arrangements.

Dr. J. S. WIGHT, of Brooklyn, read a paper entitled

TREATMENT OF CARCINOMA OF THE BREAST.

He reported 17 cases of carcinoma of the breast, in nearly all of which the results from operation were very favorable, and the patients continued immune and in good health after periods ranging from one to six years.

Tumors of the breast may be divided into three kinds: 1, those that may be cured by operation; 2, those in which an operation may give temporary relief and comfort; 3, those in which an operation is impossible and inadvisable. The cardinal precept is, the earlier an operation, other things being equal, the more certain will be the prospect of a cure. The minimum of time should be taken, and the tumor, as well as its infected environment, must be removed. In the case of an incipient tumor of the breast the entire breast must be removed. Disaster follows neglect of this rule.

From fifteen to forty-five minutes are required for the operation. A continuous incision is made around the tumor, including, if possible, all infected tissue. Then the growth is rapidly excised, the hands of assistants following the knife to repress and control hemorrhage. Pressure-forceps are freely used on all the larger bleeding vessels. If any adjacent or subjacent portions of infected tissue remain, they are quickly excised. In all cases the submammary fascia is removed, and the sheath of the great pectoral muscle is dissected off in front. A sterilized towel is pressed upon the wounded surface, to control the oozing. The contents of the axilla are excised. The incision extends from the angle of the breast-wound, so as not to expose the growth in the axilla. A pair of long-jawed pressure-forceps is pushed along the surface of the axillary growth so as to grasp the non-infected tissue. With a knife or a pair of scissors carried along the jaws of the forceps, the tumor is quickly cut away, leaving the forceps in place to prevent hemorrhage. This process is repeated, using as many long-jawed forceps as required, until the entire growth is cut out. The pressure-forceps are now removed from the breast-wound, which is again disinfected. As a rule, no ligatures are needed, the sutures, made of silk, acting as such when applied as follows: Long, curved needles are passed through the flaps and under the entire base of the wound, and are then tied so as to bring the entire surface of the wound together. These are called deep sutures.

The treatment has consisted, for the most part, in the persistent use of arsenic bromid. In some cases this remedy has been given for two or three years, with occasional intermissions. The dose has been from gr. $\frac{1}{10}$ to gr. $\frac{1}{8}$, beginning with a smaller dose and gradually increasing. In some instances a solution of gold and arsenic bromid, in doses of from 5 to 15 drops after meals, has been employed. These remedies are given on the theory that they are antagonistic to the infection of the disease under consideration. Calcium carbonate has been given to some extent as an adjuvant to the other remedies, but it is of inferior value compared with arsenic and gold.

Dr. ARPAD G. GERSTER, of New York, read a paper entitled

THE MODERN OPERATIVE TREATMENT OF RECTAL CARCINOMA.

He divided the subject into (1) the modern methods of attack employed in extirpation and the details of the after-treatment; (2) the preservation of or substitutes for the sphincteric function; and (3) remote sequelæ of these newer methods.

Early operations for the removal of extensive rectal neoplasms were imperfect, bloody, and dangerous, and attended with a high rate of mortality. Volkmann, in 1883, in removing a periosteal sarcoma of the sacrum, accidentally opened the sacral canal; the patient did not suffer any serious damage, and promptly recovered. This observation encouraged Kraske, then assistant to Volkmann, to study the question, and, as a fruit of these studies, appeared his remarkable publication in 1885, advocating excision of the left half of the lower portion of the sacrum up to the third sacral foramen, thus enabling the surgeon to approach the gut from behind and attack a large number of tumors from above. The

relative position of colotomy was changed in two ways. The number of colotomies performed as a purely palliative step steadily diminished, being limited to hopeless cases; but Kraske's operation is also employed when a satisfactory cleansing of the large gut is rendered impossible or even difficult by whatever cause, and more so preceding resection than amputation, for obvious reasons. More and more stress is laid upon thorough evacuation and cleansing of the gut as a preliminary aseptic measure, with or without colotomy.

Kraske's procedure, effected through a median longitudinal incision, was modified by Heinecke, who made a T-shaped external incision, dividing the sacrum and coccyx along the lines of this incision, thus producing two lateral triangular osteo-integumental flaps, which were to be replaced and sutured after the rectal operation was finished. This in turn was modified by Kocher, with a view of enabling the surgeon to divide the sacrum above the third sacral foramen without injury to the third and fourth anterior sacral nerves. Levy recommended an incision of the shape of an inverted capital U, the arch of the letter corresponding to the transverse section through the sacrum. Hegar employed a V-shaped osteo-integumental flap.

It is curious that the vagina, offering such a ready and accessible roadway to the rectum, had so long escaped the attention and ingenuity of enterprising rectal surgeons. This was suggested at about the same time by Rehn and by Campenon, a Frenchman. This method is applicable for both resection and amputation of the rectum.

To preserve the sphincteric apparatus whenever possible, and not to interfere with its nervous supply, by respecting the integrity of the upper three pairs of sacral motor nerves has become a generally-accepted principle of modern surgery. A number of more or less successful attempts have been made to provide a substitute for lost sphincteric action. Willems, Rydygier, and Witzel almost simultaneously proposed similar methods, consisting of an ingenious utilization of part of the gluteus muscle for the occlusion of the amputated and otherwise patulous rectal stump. Witzel reported six successful cases.

Gersung advocated a radically different procedure, consisting in simple torsion around its own axis of the extremity of the rectal stump, followed by fixation of the twisted gut to the skin by suture. An elastic resistance to the pressure of the fecal column is thus generated, sufficient to retain solid and liquid matter until the resistance is overcome by voluntary intra-abdominal pressure. This method, being the simplest, certainly deserves the preference and extensive trial.

Among the remote sequelæ, other than incontinence, is prolapse of the rectum. Morestin mentions too well-observed instances of procidentia uteri directly produced by Kraske's operation. Sacral fistulæ are the bane of modern rectal surgery.

DR. L. McLANE TIFFANY expressed the opinion that the floor of the mouth should be opened in operating on cases of carcinoma of the tongue. As to the amount of tissue to be taken away, he thought this depended very largely upon the operator, but in the case of the breast he considered it right to take everything in the neighborhood. He stated that he had had two deaths in 164 cases, one of which was due to sepsis and the other took

place during cauterization. He contended that local recurrence meant recurrence in the neighborhood of the scar, and stated that a second local recurrence is the most suddenly fatal. In some cases of carcinoma of the breast life has been prolonged ten or fifteen years by operation.

DR. MCGRAW agreed that in all cases, however young, the axillary glands should be removed.

DR. CHRISTIAN FENDER said that he considered it important that when the floor of the mouth and the tongue are taken away something in the way of a substitute should be given the patient. He explained his method of doing this, which consisted in turning up from the neck a flap which was sewed to the tongue, or, when that was removed, to the mucous membrane.

DR. W. H. CARMALT, of New Haven, suggested that a great deal of the danger in these operations might be avoided if a channel could be made through the trachea, through which the patients could breathe.

DR. J. COLLINS WARREN showed a specimen which he had removed from a rib in an operation, considered by him to be complete. He thought that the operation should include resection of the jaw and the removal of at least half, if not the whole, of the tongue. He had obtained the histories of about 40 or 50 of his cases in which he had operated after 1880. So far as he knew, only 2 deaths have occurred in about 80 cases, one of which was due to erysipelas, and the other to renal failure. There were about 8 recoveries out of 29 cases, a proportion of 27 per cent. In operating on the breast he always begins his dissection in the axilla, and makes an incision up to the clavicle, with another one at right angles to it.

The next subject for discussion was

THE PRESENT STATUS OF ANESTHESIA.

DR. G. W. GAY, of Boston, read a paper entitled CIRCUMSTANCES UNDER WHICH CHLOROFORM IS PREFERABLE TO ETHER AS AN ANESTHETIC.

DR. ROBERT F. WEIR, of New York, read an article entitled

THE INFLUENCE OF ETHER ON THE KIDNEYS.

DR. T. F. PREWITT, of St. Louis, said that in certain cases of respiratory trouble chloroform was preferable to ether, but in many conditions of local trouble he thought ether was better. He considered chloroform safer in diseases of the kidney and the heart.

DR. H. R. WHARTON, of Philadelphia, said that in the past he had usually employed chloroform in performing tracheotomy, but at the present time he was not using any anesthetic during this operation. He considered cocaine very valuable, and called attention to the great risk of administering ether to very young children, as he had seen death follow in a very few hours in a child less than six months old. Dr. Wharton never uses anesthetics now in cases under six years of age, except when absolutely necessary, when he prefers chloroform.

DR. J. D. RUSHMORE, of Brooklyn, said that he had one case of death in which he had used ether in a child. He considers chloroform preferable in those cases in which there is trouble with respiration, as, for instance, from spasms. In many cases in young children anything is to be avoided that will interfere with the heart's action.

In the past it was taught that ether should be given as concentrated as possible, and this is but one instance of erroneous teaching. The method used by Dr. Rushmore at present is to permit the patient to get plenty of air while being etherized, and he claimed that ether should be administered with clock-work regularity, *i. e.*, drop by drop, instead of a large quantity at one time.

DR. ROBERT ABBE, of New York, said that he did not agree with those who intimated that the giving of ether required less skill than the giving of chloroform. He stated that hypodermic injection of morphia previous to administering the ether was useful. He considered that the exposure of the body during operation and during transference to and from the operating-room was a very prolific source of pulmonary trouble. With regard to the anesthetic best suited to children, Dr. Abbe stated that he considered ether preferable, and that he had abandoned the use of chloroform in children since he had one death which he considered was due to this anesthetic. He related that he had treated a stab-wound of the stomach under cocaine, and that he had also performed supra-pubic cystotomy under its influence. In his opinion the patient upon whom the supra-pubic cystotomy was performed would certainly have died had ether been used.

DR. F. E. LANGE, of New York, said that both chloroform and ether had their indications and their contraindications, but as long as no absolutely safe anesthetic existed he considered ether good enough. He had lost patients under both chloroform and ether. He contended that chloroform was not the anesthetic to be used when there was a weak heart, but admitted that in some cases ether was preferable.

The discussion on the

RESTORATION OF JOINT-FUNCTION AFTER FRACTURE,

which was to have been taken part in by DRs. W. H. CARMALT, of New Haven; L. A. SAYRE, of New York; N. P. DANDRIDGE, of Cincinnati; J. B. ROBERTS, of Philadelphia; E. H. BRADFORD, of Boston; and JOHN ASHHURST, JR., of Philadelphia, was read by title.

DR. JOHN B. DEEVER, of Philadelphia, then presented a paper upon the

INFLUENCE OF ETHER-NARCOSIS UPON THE GENITO-URINARY TRACT.

He stated that examinations of the urine of subjects having normal kidneys, before and after administering chloroform, showed that in one-third there were deleterious effects on the kidneys, lasting two or three days, with traces of albumin, cylinders, leukocytes, and epithelium from the kidneys, ureters, and bladder. The effect of etherization on general tissue-metamorphosis, apart from any effect upon the kidneys, was shown by the effect upon the specific gravity of the urine. In fifty cases it was markedly increased, while in only thirteen it was decreased. The conclusion is that ether has a very considerable irritating effect on the kidneys. The necessity of examining the urine of every patient to be anesthetized is to be emphasized.

The following papers were read by title:

GUNSHOT-WOUNDS OF THE HEART,

by CLAUDIUS H. MASTIN, M. D., of Mobile (which will shortly appear in THE MEDICAL NEWS).

PERSONAL EXPERIENCES WITH MAD DOGS,

by DR. BASIL NORRIS.

THE RADICAL CURE OF HERNIA BY A NEW PROCEDURE, by DR. JOHN H. PACKARD, of Philadelphia.

LIGATURE OF THE SPERMATIC CORD IN THE TREATMENT OF HYPERTROPHY OF THE PROSTATE,

by DR. J. EWING MEARS, of Philadelphia.

DR. HENRY R. WHARTON, of Philadelphia, read a paper entitled

DISLOCATION OF THE ULNAR NERVE AT THE ELBOW.

He reported a case of his own, together with thirteen others collected from the literature. The condition is a comparatively rare one, occurring independently of fractures or dislocations of the bones of the elbow, and may result from direct violence, or from muscular effort or violent flexion of the arm at the elbow, causing laceration of the fascia that holds the nerve in its groove at the back of the inner condyle of the humerus. In two cases of dislocation of the ulnar nerve in dead subjects the internal condyle of the humerus was found small, and the groove for the nerve shallow, and the fascia binding down the nerve very poorly developed; an unusual forward position of the internal lateral ligament was also noted.

The most satisfactory method of securing the nerve consists in its exposure, and, having made a bed for the nerve by dividing the fibrous structures behind the inner condyle of the humerus, to fix it in its usual position by two kangaroo-tendon loops passed through the inner margin of the triceps tendon and somewhat loosely around the nerve, several sutures being used to unite the divided margin of the fascial expansion of the triceps tendon superficial to the nerve. In all cases in which the nerve has been exposed and sutured in its normal position the result has been satisfactory. In no recorded case has neuritis developed as a result of operative treatment.

DR. H. L. BURRELL, of Boston, read a paper entitled LIGATURE OF THE INNOMINATE ARTERY, WITH THE REPORT OF A CASE.

A paper on

TWO CASES OF DISPLACEMENT OF THE ULNAR NERVE AT THE ELBOW SUCCESSFULLY TREATED BY OPERATION,

by SIR WILLIAM MACCORMAC, of London, was read by title.

DR. JOHN WHELOCK ELLIOTT, of Boston, read a paper on

IMMEDIATE SUTURE OF THE GALL-DUCTS AND GALL-BLADDER AFTER EXTRACTION OF STONES, WITH CASES.

He contended that the operations of cholecystotomy and cholecystenterostomy have become too much the routine practice for the relief of gall-stones, and that incision of the ducts or the gall-bladder followed by immediate suture is the proper operation in the majority of cases, especially in recent cases. He reported five such operations: one on the hepatic duct, one on the common duct, and three on the gall-bladder. All were successful. The following conclusions were presented:

1. Every operation should be conducted with the idea

of restoring the functions of the ducts, and any irreparable injury to them is a serious calamity.

2. Immediate closure of the gall-bladder is safe if the ducts are clear and its walls healthy.

3. Incision and suture of the cystic duct are preferable to prolonged manipulation.

4. Incision and suture of the hepatic and common ducts constitute the operation of choice for impacted stones.

5. The mortality of this operation is less than 18 per cent.

6. If the condition of the patient is critical, a preliminary cholecystotomy is advisable.

7. Cholecystenterostomy should be reserved for irremediable stenosis of the common duct.

DR. S. J. MIXTER, of Boston, read a paper entitled

CONGENITAL ESOPHAGEAL POUCH; EXCISION; IMMEDIATE SUTURE OF ESOPHAGUS; RECOVERY.

A woman, fifty years of age, had always had some difficulty in swallowing, which during four years had become aggravated. Esophageal bougies were passed, previous to her admission to the hospital, but without marked improvement. Attempts were made to pass esophageal bougies and probangs, but without success, all being stopped about eight-and-one-half inches from the incisor teeth. Some regurgitation of food attended these attempts. It was found, however, that a bougie of any size that could be made to pass the obstruction by hugging the right side of the esophagus went on without difficulty into the stomach without being grasped as by a stricture. After three weeks of treatment the woman was able to swallow slightly better; but after some time she returned, having worn an esophageal tube most of the time, and having only been able to swallow soft solids and liquids. The operation consisted in an incision, three inches long, parallel to and in front of the sterno-mastoid muscle. The omo-hyoid was divided and the esophagus reached in the usual manner. The bulb of a probang previously introduced could be easily felt, and on dissection the pouch in which it was situated was easily isolated. An incision was made into the sac, whence the finger could be passed without difficulty up into the pharynx, and, after hooking it over a sharp edge of mucous membrane, down into the esophagus. The largest bougie (about three-quarters of an inch in diameter) could be easily passed into the stomach after the tip had been guided by the finger past the fold. The pouch, about the size of an egg, lay to the left and behind the esophagus. Enough of the sac was removed to make the esophagus a straight tube from the "spur" up, and the edges were united with interrupted catgut stitches. The external wound was closed, with the exception of a small opening for drainage by means of a gauze wick. Recovery was perfect, and the patient had had no return of the trouble, being able to swallow any kind of food.

This case is a perfect example of the true esophageal pouch, there being no constriction in the tube, and the obstruction to the passage of food being only the thin crescentic edge of the spur between the pouch and the esophagus, which, pressed against the opposite side of the esophagus, acted as a valve.

DR. ROSWELL PARK, of Buffalo, read a paper

ON THE CONSEQUENCES OF HYPEREMIA AND THE PATHOLOGY OF INFLAMMATION AND SUPPURATION.

He pointed out that purely mechanical and traumatic disturbances and surgical infectious diseases, especially their local manifestations, have about the same apparent beginning, and their local phenomena are in general the same up to a certain point, when there is wide variation in local manifestations and systemic complications. Heretofore all these manifestations have been included under the term "inflammation," and it has been taught that inflammation at one time is congestion with slight exudation, at another hyperemia with copious exudation, or that at still another it leads to pus-production, while at yet another its final result is hyperplasia and tissue new-formation, with more or less induration. Hence these have been described as "simple," "acute," "infective," and "chronic" inflammation, etc.

Dr. Park's thesis was that the term inflammation ought to be confined exclusively to one distinct class of lesions, those produced by micro-organisms, and never to those other lesions into which the question of infectious micro-organisms does not enter, but that such lesions should have names based upon the pathologic lesions.

It is well enough to say that all inflammation begins with congestion, and this may be true; but many congestions never terminate in genuine inflammation. Congestion should be described as the result of certain exciting causes—of which bacteria may be one—in which case the congestion itself is subsidiary, and in a measure accidental or conservative.

A violent sprain of the knee-joint may occasion *calor, rubor, dolor, et tumor*, with disturbed function from dilatation of vessels, hyperemia, tension and pressure on nerves, chemic change, and the escape of fluid into previously existing cavities. Let everything go well and this fluid is quickly absorbed, the vessels return to their natural size, pain, redness, and swelling subside, save for perhaps a little chronic thickening of the parts. This process should not be spoken of as "inflammation." But let there be infection from any source, and let micro-organisms once secure access to the parts within, and how quickly is the whole clinical picture changed. There is not only purulent synovitis or pyarthrosis, but unmistakable, perhaps fatal, constitutional disturbances. This is inflammation—a condition of congestion and exudation *plus* the special disastrous characteristic *infection*. Without infection there is no genuine inflammation.

Dr. Park was inclined to indorse Metschnikoff's definition of inflammation as a phagocytic reaction on the part of the organism against irritants in the shape of micro-organisms, the essential phenomena of inflammation representing an actual struggle between the phagocytes and the irritants—Virchow's "battle of the cells"—pus and pus-cells being simply the *débris*—the dead bodies of animal cells slain in the conflict. That animal cells possess some such activity has been shown by many observers independently, this fact having been called in later years "chemiotaxis." The peculiar attraction between bacterium and cell, by which the latter endeavors to become a phagocyte, while yet inexplicable, is unmistakable, and phagocytosis is a proved fact.

Dr. Park submitted a classification for text-book arrangement, commencing with hyperemia and congestion, then passing to inflammation—*i. e.*, infection—the

matter of pus-formation, first in its pathologic, and then in its clinical aspect. He differentiated between the various substances known as pus and suggested the following names: For material produced in the course of an acute phlegmon, infectious, toxic, the old name "pus;" for material from healthy granulating surfaces, or from raw tissues that have not yet had time to granulate, which is free from bacteria, and has no infectious or toxic properties, the name "pyoid" or "puruloid;" for the contents of old cold abscesses that have long since lost everything except the grossest and crudest resemblance to the pus which it may originally have been—the name "archepyon."

There is more in all this than straining after accuracy, because the treatment in these different conditions is distinct and unmistakable, and would be unfortunate in either of the other states: real, genuine pus requiring the promptest possible evacuation, as pus left alone will do more harm than the knife of the surgeon if judiciously used; pyoid or puruloid material calling for little or no special treatment, except absolute cleanliness, and archepyon indicating a condition that calls for extirpation of infected tissue, complete and final disposition of that membrane formerly known as pyogenic membrane, eradication of all infected tissue, etc.

The limiting membrane of old or cold abscesses is anything but pus-producing, but, on the other hand, pus-protective, and hence to call this membrane pyogenic is a misnomer. Dr. Park suggested, instead, "pyophylactic." He raised some practical questions as to the extirpation of pyophylactic membrane in the average cold abscess, and stated that when complete extirpation was impossible he excised so much as proper access could be had to, and then used a solution of zinc chlorid, 50 per cent. strength, to mop out the sinus after being curetted, or, in case the curet cannot follow it, to be injected into the sinus.

If the pyophylactic membrane is not treated by extirpation, it is gradually made away with by granulation-tissue, and the removal of its component parts by phagocytic action and substitution of granulations therefor. This process is liable to interruption or complete cessation, even to reinfection from organisms yet alive within its substance. Hence, the ideal method of dealing with this membrane is complete removal; next to this, complete destruction by caustic agents; and in default of these, the application of antiseptics and stimulating substances.

Dr. Park emphasized the distinction between the obligate and the facultative pyogenic bacteria, the former including those whose function seems to be solely to set up septic disturbance and produce pus—the various staphylococci, namely, the *S. pyogenes aureus*, *albus*, *citreus*, *epidermidis albus*, etc.—and the streptococci; and the latter class including those that have only occasional pyogenic properties, such as the bacillus tuberculosis of Koch, the bacillus tetani, the bacillus mallei, etc.

Dr. W. S. HALSTED pointed out some of the difficulties often encountered in determining what was present in a joint—that is, whether it be a hyperemia or an inflammation, instancing the fact that a subcutaneous injury about the knee-joint may cause much redness, but this might not be due to micro-organisms. He referred to the case of a man with endocarditis and slough-

ing of the valves of the heart due entirely to gonococci. As regards granulation, it is very difficult sometimes to tell from the product obtained whether an infection has taken place or not.

Dr. L. McLANE TIFFANY said that the difficulty in reaching a conclusion was the determination whether or not a micro-organism was present. This is the most important point of all and seems to be the most interesting in the new nomenclature.

Dr. JOHN PARMENTER, of Buffalo, said that the problem in his opinion was, What is the causation of pus? He said that in several cases he had been in doubt.

Dr. PARK, in conclusion, said that in his opinion, if organisms had infected, one would soon be made aware of the fact by the formation of pus; and if this does not occur, it would be safe to assume that there is no infection.

Dr. CHRISTIAN FENGER, of Chicago, read a paper entitled

HERNIA OF THE BLADDER AS MET WITH DURING OPERATIONS FOR INGUINAL AND CRURAL HERNIA.

Dr. S. H. WEEKS, of Portland, Me., reported

A CASE OF CHOLECYSTECTOMY.

The patient was a married woman forty-seven years of age, who for four years had been subject to severe paroxysmal attacks of pain in the upper part of the abdomen. The pain would begin in the right hypochondriac region and extend across to the epigastric and left hypochondriac regions, at times also extending upward toward the right shoulder. It was most intense in the epigastric region and extended upward to the neck in the median line. During the paroxysms the woman vomited freely, the vomited matter always containing a large amount of bile. A diagnosis of biliary colic due to occlusion of the cystic duct having been made, an operation was recommended, and was performed eighteen days after admission to the hospital. A vertical incision about four inches long was made external to the right rectus muscle at a point corresponding to the tip of the tenth rib. The gall-bladder was much contracted and contained from twelve to fifteen small calculi, varying in size from a gravel to a pea. After these were removed a finger was passed along the under surface of the cystic duct, which was found to be occluded by a large calculus. This was removed by making an incision through the walls of the duct, and was found to be 20 mm. in its long diameter and 14 mm. transversely. After the removal of the stone from the cystic duct the gall-bladder was excised, the cystic duct being tied as high up as possible; but it could not be tied beyond the incision for the removal of the calculus, and consequently there was an opening through which bile could escape. A drainage-tube of glass was inserted well down to the bottom of the wound, and iodoform-gauze packed freely about it. The gauze was packed into the wound during the operation upon the gall-bladder and ducts, to protect the peritoneal cavity from blood and bile. Much pain followed the operation for several days, probably occasioned by the glass drainage-tube, and a rubber tube was recommended in preference, supplementing it always by gauze packed around the drainage-tube.

At first there were pain in the side, vomiting, and high

temperature, a large amount of bile escaping from the wound, but five days after the operation the patient rested well, and about three weeks later was discharged from the hospital, the wound having completely healed, and the patient being entirely relieved of all her former symptoms.

DR. M. H. RICHARDSON showed two stones that he had recently removed. In the first case the stone was removed by a suprapubic operation, care being used to effect distention of the bladder by boric acid.

DR. ROSWELL PARK, of Buffalo, read a paper entitled

INJURIES TO THE PNEUMOGASTRIC AND PHRENIC NERVES.

DR. BRADFORD presented a photograph showing the good results that had been obtained by a man, sixty years of age, in an attempt to get motion in the knee-joint, by tying weights to his feet and sitting on a chair and throwing the weights off. In this peculiar way complete motion of the joint was restored, and the man has since been able to walk perfectly well.

ASSOCIATION OF AMERICAN PHYSICIANS.

Tenth Annual Meeting, Held in the Army Medical Museum and Library, Washington, D. C., May 30 and 31, 1895.

(Concluded from page 650.)

SECOND DAY—MAY 31ST.

A discussion on

DIPHTHERIA-ANTITOXIN

was opened DR. WILLIAM H. WELCH, of Baltimore, who said that the attack upon the soundness of the experimental basis on which the use of the antitoxin was employed in the treatment of diphtheria was not justified. Such a position could only be assumed by denying the etiologic relations of the Klebs-Loeffler bacillus, and this but very few are willing to do. The results of experiments on animals have been most striking; in the case of tetanus they have, however, been even more so; but the results obtained in animals cannot be directly applied to man. The therapeutic outcome of the use of the antitoxin against tetanus has been disappointing because the toxins generated accumulate in large amounts before the symptoms of the disease make their appearance and an opportunity is afforded for the use of the antitoxin. How the antitoxin acts is not yet known. According to one view, it exerts a chemic action of antidotal character, the poison or its effects being neutralized. According to a second view, the action is of a vital character, and is effected through the agency of the cells, which are rendered more resistant and less tolerant of invasion. As against the former is the occurrence of palsies, notwithstanding the treatment. That the treatment is not invariably efficacious may be partly owing to the fact that it is not possible to determine the amount of toxin circulating in the blood at a given time, and therefore also the dosage of the antitoxin to be used. The benefits of the treatment grow less as the period of the disease is the more advanced. The only certain test of the diphtheric nature of a case resides in the results of bacteriologic examination. Certain mild cases have been found to be diphtheric, while

in others presenting membrane characteristic organisms have not been found. It seems likely that between 5 and 10 per cent. of the latter cases are not diphtheric.

Further, diphtheria in the human being differs from experimental diphtheria in not always being a pure infection; very commonly, indeed, it is a condition of multiple infection. The action of the antitoxin may be looked upon as a natural mode of cure, for it is probable that recovery ensues under ordinary conditions by the development in the blood of an antitoxin, only that by the artificial method the cure is hastened and perhaps fortified. The statistics thus far available show that by means of the antitoxin the mortality from diphtheria in various countries has been reduced from between 40 and 50 per cent. to between 10 and 20 per cent. These figures are viewed from three standpoints: (1) that they prove too much—i. e., nothing; (2) that they leave the question in doubt; (3) that they justify a favorable conclusion.

It is yet too early to determine the question from the figures alone. More favorable, however, than the mere figures is the personal impression of the clinician as to the influence exerted upon the disease, and this has been generally favorable. This impression has been fortified by the results of post-mortem examination, which has almost invariably shown an absence of fresh diphtheria. The employment of the antitoxin, in contradiction of earlier statements, does seem to cause some injurious effects, such as albuminuria, nephritis, profound constitutional phenomena, etc. In view of all of the facts, however, it is the duty of the physician to use the remedy and at as early a period in the disease as possible, exercising care in dosage to avert unpleasant effects.

A paper by DR. H. C. ERNST, of Jamaica Plain, on

THE PREPARATION OF THE ANTITOXIN,

was read by title.

DR. A. L. MASON, of Boston, presented statistics from the diphtheria-department of the Boston City Hospital, which receives a large number of the worst class of cases. The mortality from diphtheria for ten years prior to the use of the antitoxin, in December, 1894, ranged from 45 to 52 per cent., one-third of the cases requiring tracheotomy or intubation. From December 12, 1894, to May 14, 1895, among 306 cases treated with the antitoxin, there were 81 deaths—a mortality of 26.4 per cent. Of the whole number, 31 required operative interference, with 19 deaths—a mortality of 61 per cent., and a reduction of about one-third. From December 12, 1893, to May 12, 1894, there occurred 258 cases in which the Klebs-Loeffler bacillus was found, with a mortality of 44 per cent. For the city at large the mortality from January 1 to May 1, 1895, during the antitoxin-period, was 14 per cent., as compared with a mortality of 31 per cent. during the corresponding period of previous years. Even making allowance for a number of mild cases that may be included in these figures, the conclusion cannot be escaped that a distinct reduction in the mortality has been effected. Further, the favorable results are apparent not only in the individual case, but also in the general appearance of the diphtheria-ward. Instead of serious and anxious faces, the ward presents an appearance of comfort and contentment, and the various officers approach their service in these wards with more satisfaction than before. The use of the new remedy has had a distinctly

beneficial moral effect on the attendants. The immunity conferred by prophylactic doses of the antitoxin has proved to be of but short duration. The influence of the treatment upon the epidemic occurrence of the disease is not appreciable. The effect on the membrane in the individual case is remarkable; it rapidly becomes circumscribed and soon disappears. It has been found that the proportion of tracheotomies and intubations has been diminished with the use of the antitoxin-treatment, while the actual results in the cases operated upon have been more favorable than before. At the Boston City Hospital the proportion of cases in which paralysis has developed is smaller than heretofore, and the treatment has altogether proved most valuable.

DR. A. JACOBI, of New York, said that he was altogether favorably impressed with the efficacy of the antitoxin-treatment, although the present statistics are not sufficient to justify a final conclusion. Occasionally it is found that other methods of treatment will yield remarkably good results; thus of 40 consecutive cases treated with mercurials recovery ensued in 39. The local treatment must not be ignored when the antitoxin is used. It is well to recommend also the conjunction of the mercurial treatment, which alone has proved so serviceable. The clinician is not so much concerned as to which remedy brings about the good result, just so it is effected. Dr. Jacobi expressed unwillingness to accept the postulate that the detection of the Klebs-Loeffler bacillus is essential to the diagnosis of diphtheria. In most cases of diphtheria the bacilli and micrococci are present in association. At any rate, it is certain that the antitoxin-treatment can only be efficacious in cases presenting diphtheria-bacilli.

DR. JOHN S. BILLINGS, of Washington, insisted that it is only by the statistical method that a conclusion can be arrived at in determining the efficacy of the antitoxin-method of treatment. Laboratory-research is only suggestive; clinical observation must afford the demonstration. There is manifest impropriety in comparing with one another cases of different classes. For instance, those treated solely with the antitoxin and those with other measures alone or in conjunction with the antitoxin should be considered separately. Another important matter which time alone can determine is the influence of the treatment upon the epidemic occurrence and distribution of the disease. It is known that changes have taken place in the geographic distribution of diphtheria, which has grown less prevalent in the Northwest and has increased in the cities and towns of the East.

DR. A. C. ABBOTT, of Philadelphia, insisted upon the importance of the bacteriologic investigation of diphtheria, pointing out that until this had been undertaken the clinical views upon the subject were in a most chaotic state. By this means also it has been possible to recognize the pathologic and biologic characters of the disease. Further, it has been shown that the non-diphtheric form is not so fatal in its termination as the diphtheric form.

DR. F. H. WILLIAMS, of Boston, pointed out a possible danger from the early detachment of the membrane in the larynx, following the use of the antitoxin and the liability to cause obstruction. He cited a case in which such a contingency arose and was overcome by the administration of an emetic and expulsion of the membrane. Dr. Williams referred to the occurrence of

swelling of the joints in the sequence of the antitoxin-treatment. He also exhibited a sterilizable syringe for making the injections. It is constructed of glass, and the piston is wrapped with asbestos-packing. The needle is attached through the intermediation of a bit of rubber-tubing, so that with a restless child there is no danger of breaking the glass. Other things being equal, the prognosis of a pseudo-membranous inflammation of the throat is more favorable when diphtheria-bacilli are not present. It is well to examine all of the throats in a household in which there is a case of diphtheria. Membrane may later form in cases in which at first there were no macroscopic evidences of disease.

DR. WILLIAM OSLER, of Baltimore, reported five cases of membranous angina in which diphtheria-bacilli were found and which were successfully treated with the antitoxin. One case not treated with the antitoxin terminated fatally, and presented post mortem the lesions of chronic interstitial nephritis. In a case of follicular tonsillitis diphtheria-bacilli were found, and the antitoxin was employed with a favorable result. One case presented multiple infection, having a discharge from the nares, with the symptoms of coryza, a purulent discharge from the right ear, and membranous deposits upon both thumbs. The tonsils and larynx were red, but not swollen, and presented no membrane. In the various lesions diphtheria-bacilli were found, together with streptococci and staphylococci. In one case of diphtheria no membrane could be detected, but in cultures from the throat typical bacilli developed. Recovery ensued without the use of the antitoxin. In three cases of membranous angina the streptococcus pyogenes was found in two and the bacillus pyocyaneus in one, but no diphtheria-bacilli. Finally, from the throat of a case presenting redness and swelling of the throat and tonsils, with slight, passing elevation of temperature, but without membrane, a bacillus was isolated, resembling the diphtheria-organism, but being shorter and plumper, and staining irregularly and not acidifying litmus-bouillon, but alkalinizing it and growing much more profusely on ordinary media and inducing no reaction in inoculated guinea-pigs.

DR. D. W. PRENTISS, of Washington, presented a patient whose case he had reported to the Association six years before as one of purpura hæmorrhagica rheumatica, with bleeding from the bladder and the kidneys and other parts. For a year the face and legs have been swollen, and for five months the eyesight has been failing. Ophthalmoscopic examination disclosed the existence of degenerative changes in the retina of both eyes, with hemorrhages. The urine is clear, pale, amber, acid, of a specific gravity of 1005, and contains 25 per cent. of albumin, $\frac{1}{3}$ per cent. of urea, large and small granular casts, and epithelial casts. The association of purpura with nephritis is rare.

DR. WILLIAM OSLER, of Baltimore, said that the case really belongs in the group described as Henoch's purpura, in which there is recurrence from year to year, with marked gastro-intestinal crises, arthritis, hemorrhage from the mucous surfaces, various cutaneous eruptions, not necessarily hemorrhagic, and acute nephritis. Dr. Osler has himself recorded one fatal case of this kind. The condition appears to be related to giant urticaria, and may occur through several generations of a family.

DR. CHARLES G. STOCKTON, of Buffalo, cited a case presenting hemorrhage into the retina repeatedly at intervals during five years, without other symptoms of purpura or arthritis. There was a condition of general ill-health, with gastric crises. Examination of the blood disclosed no peculiarity, and there were no symptoms referable to derangement of the function of the kidneys.

DR. J. G. ADAMI, of Montreal, read a paper entitled

A CASE OF MADURA FOOT (MYCETOMA PEDIS).

The case occurred in a French Canadian, twenty-one years of age, who had lived in America all his life, and in whom at the age of eleven years there appeared upon the foot a bluish spot that increased in size. An injury was followed by the escape of blood; then buttons of flesh formed on various parts of the foot, each of which proved to be constituted of a cutaneous overgrowth of low vitality around the opening of a sinus. In places there were also cicatrices. The foot was riddled by sinuses passing deeply in all directions, and the bones of the foot were carious. The muscles of the leg were wasted, and some of the ligaments had suffered destruction. The bones of the foot were in a condition of rarefying osteitis, and the member was removed by amputation. Recovery was complicated by pleurisy, but was eventually perfect. Examination of the discharge under the microscope disclosed appearances resembling those presented by actinomyces, than which, however, the bodies seen were larger. The case is believed to be one of the first authenticated cases of madura foot on the continent of America, if not the first, although the affection is not uncommon in India. It appears in two forms—the black and the white.

DR. W. P. NORTHRUP, of New York, read a paper entitled

GONORRHEAL ARTHRITIS—CLINICAL OBSERVATIONS.

He reported the case of a newborn infant that on the fourth day presented conjunctivitis, in the secretion of which gonococci were found. On the eleventh day, after exposure to wet, the mother was seized with inflammation of a single joint, complicated by erysipelas. There was no evidence of gonorrhea on the part of the mother, no gonococci could be found in the vaginal discharge, and no urethral threads in the urine of the father. In a second case a lad presented inflammation of the elbow, without a history of gonorrhea or of exposure to infection. There was, however, a history of rheumatism and exposure, and there was audible a basic murmur transmitted into the vessels of the neck. Antirheumatic remedies were without avail. Recovery ensued after rest, immobilization, and passive motion. A third case occurred in a man of twenty-eight, who had had gonorrhea two months previously, and for ten days presented swelling of the elbow, with sensitiveness. Antirheumatic remedies were employed without success, but recovery followed application of a plaster-dressing followed by passive motion. A fourth case occurred in a man of forty, with a history of rheumatism and of alcoholism, and of gonorrhea of seven weeks' standing. The right elbow was swollen, painful, and fluctuant. The treatment consisted in the application of ice-bags, of an open splint of plaster and steel bands, and was followed by recovery. A fifth case occurred in a man,

twenty-seven years old, who had had gonorrhea two years and also five weeks previously to coming under observation. The knee-joint was inflamed and presented fluctuation. Nevertheless recovery ensued after treatment similar to that pursued in the remaining cases.

In this group of cases the prominent features were involvement of a single joint—elbow or knee—presenting a fusiform swelling indicating periarticular involvement, with synovial effusion, probably serous, which was soon absorbed, leaving no adhesions. The condition was attended with exquisite tenderness, with little local heat and little elevation of temperature (100° to 101°). The course of the affection covered an average period of four weeks, and recovery ensued with a perfect joint.

DR. WILLIAM H. WELCH, of Baltimore, stated that there are distinct types of gonorrheal arthritis, some serous, some suppurative. Bacteriologic examination of the fluid from the joints was at first attended with unsatisfactory results, but cultures were more successful. A case was cited in which, in the absence of a history of gonorrhea, swelling of the ankle-joint appeared. On incision, two of the tendon-sheaths were found distended with pus, cover-slip preparations of which disclosed the presence of diplococci having the general morphologic appearances of gonococci, and cultivation-observations confirmed the identity of the organism. Agar, to which has been added an extract of the fetal pig made with water, constitutes the most favorable medium for the cultivation of the gonococcus. So-called gonorrheal arthritis presents no pathognomonic pathologic anatomy. Small ecchymoses in the synovial membrane have frequently been noticed. A case was cited of a woman presenting the clinical aspect of malignant endocarditis, in which, after death, a vegetative endocarditis was found. Bacteriologic examination of the blood made several days before death disclosed the presence of organisms resembling gonococci, and typical gonococci were found in sections of a vegetation situated upon the mitral valve.

DR. F. C. SHATTUCK, of Boston, related that of 64 cases of gonorrheal synovitis observed at the Massachusetts General Hospital but 6 were monoarticular; two joints were involved in 4 cases, and 3 or more in 54. In 3 instances gonococci were cultivated from the blood obtained during life, and in one it was possible to communicate gonorrhea to a bitch with the culture. Reference was made to two fatal cases of endocarditis in association with gonorrheal synovitis. In one an autopsy was secured, and an old endocarditis was found, on which was grafted the ulcerative complication. Another case was referred to, presenting a urethral discharge, followed by the development of synovitis, in which gonococci were not found in the discharge.

DR. CHARLES CARY, of Buffalo, cited the case of a young man who presented inflammation of several joints, in conjunction with gonorrheal conjunctivitis, and in which it was believed that gonorrheal phlebitis developed. In a second case, occurring in a woman presenting a gonorrheal discharge, inflammation of the femoral vein was believed to have occurred. In neither case were cultures made.

DR. A. L. MASON, of Boston, stated that at the Boston City Hospital in only 25 per cent. of the cases of gonorrheal arthritis was a single joint involved. The effusion was in a large proportion of cases serous; in one

case the serum was evacuated, and subsequently pus formed. Among 120 cases a post-mortem examination was made in but one, and that has been reported by Councilman as one of gonorrheal myocarditis. In another case death resulted from myocarditis. In a few cases bacteriologic examinations were made and proved of aid. In a case in which the hip-joint was involved and unattended with urethral discharge gonococci were found in the blood.

DR. J. WEST ROOSEVELT, of New York, reported that of 10 cases in only 1 was the inflammation confined to but one joint. The arthritis of gonorrhea is more chronic and less yielding than that of rheumatism.

DR. WILLIAM OSLER, of Baltimore, stated that at the Johns Hopkins Hospital there had been 27 cases of gonorrheal arthritis, in 5 of which the joint was opened. In 4 sero-hemorrhagic fluid was found, and in but 1 pus.

DR. NORTHRUP, in concluding, added one more case to his list. This occurred in a woman, forty-five years of age, who was annoyed by a watery discharge from the vagina of three weeks' duration. There was exquisite sensitiveness of the vulva, vagina, and the neck of the uterus, and the uterus was enlarged. On examination a discharge of ropy pus was also found, and in this gonococci were detected. The cervix was swollen and edematous. Although the woman presented an appearance of profound illness she had little elevation of temperature.

DR. A. JACOBI, of New York City, reported a case of

HYPERTHERMY UP TO 65° C. (148° F.).

This occurred in a profoundly hysterical fireman, who suffered a rather severe injury, as the result of a fall between the revolving rods of some machinery, and was rendered unconscious for four days. Thereafter he complained of various pains, bloody expectoration, and had convulsions at varying intervals, with loss of consciousness, rapid respiration, unaccelerated pulse, and excessively high temperature, the last, on one occasion, reaching the height of 148° F. The temperature was taken carefully in the presence of a number of persons, and all possible precautions were observed to prevent deception. The thermometer was variously placed in the mouth, anus, axilla, popliteal space, groin, urethra, and different instruments were from time to time employed. The behavior of the patient was much influenced by attention and by suggestion. For a period of five days the temperature averaged continuously between 120° and 125° F.

DR. WILLIAM H. WELCH, of Baltimore, referred to a case that had been reported in which it was said that the temperature reached as high as 171° F. These extraordinary elevations of temperature appear physically impossible, particularly when long continued, as they are fatal to the life of the animal cell.

DR. F. C. SHATTUCK, of Boston, cited a case in which he had observed a temperature of 117° F.; every precaution had been taken to prevent fraud or deception. The patient was a hysterical young woman.

DR. M. H. FUSSELL, of Philadelphia, reported the case of a man who was clearly a malingerer, and who presented a temperature of 115° in the mouth or in the rectum, and a normal temperature in the axilla.

DR. JACOBI insisted that his observations had been made with the greatest care and all precautions and

under many different conditions. He had at first viewed the case with skepticism, but he could not doubt the results of his observations. That we cannot explain anomalies of this kind constitutes no reason why we should deny their occurrence.

The report of the Treasurer was at this stage presented and referred to Drs. Musser and Dock as a committee to audit it, and who later reported its accuracy.

DR. JOHN GUITÉRAS, of Philadelphia, read a paper entitled

SOME OBSERVATIONS OF THE SPLEEN AND MARROW IN LEUKEMIA.

He reported the case of a man aged fifty-five years, terminating fatally, and in which during life a diagnosis of splenic and myelogenic leukemia had been made, and after death anemia, hyperplasia of the spleen, lymphoid marrow in the bones, lymphoid infiltration of the liver and kidney were found. He observed a peculiar mode of cytogenesis in a large number of splenic capillaries, the erythroblast outside the epithelial wall giving off by budding a red corpuscle which is nucleated.

DR. F. H. WILLIAMS, of Boston, read a paper entitled

A COMFORTABLE WAY OF USING COLD IN FEVERS.

This consists in enveloping the patient in gauze which is saturated with cool or cold water, and the evaporation of which is hastened by fanning either by hand or, preferably, by means of a motor. In this way a considerable reduction in temperature can be effected in a short time. Some reduction may be effected even with warm water, and perhaps the best result is obtained from the alternate use of heat and cold.

DR. GEORGE DOCK, of Ann Arbor, read a paper entitled

GOITER IN MICHIGAN,

which will appear in a subsequent number of the THE MEDICAL NEWS.

DR. H. M. HURD, of Baltimore, related that in certain parts of Canada a large increase of goiter has taken place from local influences, particularly a change in the drinking-water.

DR. WILLIAM OSLER, of Baltimore, related that in some regions in which goiter was very prevalent it has now almost entirely disappeared, and it has, on the other hand, appeared in other places in which formerly it did not prevail.

DR. J. E. GRAHAM, of Toronto, read a paper entitled

DISPLACEMENTS OF THE LIVER.

He stated that these may occur from influences outside the liver and its attachments, such as tumors, abscesses, and the like, as well as from stretching or relaxation or undue length of the ligaments from any cause. The condition is not uncommon in women with pendulous abdomens, who have borne many children. A distinction is to be made between floating liver and merely movable liver. Dr. Graham reported the case of a woman, sixty-two years old, who had borne ten children, and presented cyanosis, dyspnea, dilatation of the right heart, and emphysema. The liver was displaced downward, but could be replaced when the patient assumed the recumbent posture, and could be retained in place by the use of a bandage. In a second case, a man thirty-five years old, the liver was displaced by a sub-

phrenic abscess. There existed also pyloric obstruction and gastrectasis. The liver lay obliquely in front of the stomach. In a third case, in a boy, the front wheel of a wagon had passed over the trunk, fracturing the seventh and eighth ribs. For a time a considerable area of dulness was found upon the left side, while the normal area of hepatic dulness could not be detected, so that the question arose whether the liver was originally displaced and an inflammatory process had taken place in the right hypochondrium, or if the liver was merely hidden under the diaphragm, and an inflammatory process had taken place about the spleen. The paper contained a tabulated statement of thirty published cases of displacement of the liver.

DR. M. H. FUSSELL, of Philadelphia, read a paper entitled

CARCINOMA OF THE LIVER, WITH CIRRHOSIS,

and presented two interesting specimens and microscopic sections. He detailed the account of an Italian, forty years old, who presented symptoms of hypertrophic cirrhosis of the liver, but in which, after death, although the liver was found to be enlarged, it was also studded with minute nodules and presented a peculiar reddish-white color. In microscopic sections the intermingling of cirrhosis and carcinoma was distinctly shown. The second case occurred in a girl sixteen years old, who during life had been treated for chlorosis, and died suddenly of pneumonia. The liver presented a reddish-white appearance and was firm and granular. The spleen was enlarged. Upon microscopic examination sections of the liver presented an increased amount of connective tissue and proliferation of the biliary ducts and appearances suggesting an early stage of carcinomatous change.

DR. J. G. ADAMI, of Montreal, related that he had already placed on record a case almost like the first reported, and presenting the same macroscopic and microscopic appearances.

A paper by DR. S. C. BUSEY, of Washington, entitled
EPIDEMICS OF TYPHOID FEVER, SCARLET FEVER, AND
DIPHTHERIA DUE TO MILK-INFECTION,

was read by title.

DR. S. J. MELTZER, of New York, read a paper entitled

ON THE DIRECT FARADIZATION OF THE MUCOUS MEMBRANE OF THE STOMACH AND INTESTINES OF ANIMALS (DOGS, CATS, AND RABBITS).

He had found that in dogs, cats, and rabbits the mucous membrane of the digestive canal offers a considerable resistance to the penetration of the faradic current to the muscular coat; the greatest resistance is found in the mucous membrane of the stomach. The percutaneous and the direct faradization of the stomach or the intestines cannot produce contraction in these parts.

DR. C. G. STOCKTON, of Buffalo, expressed gratification that these observations seemed to confirm some made by him and reported several years ago. Although confident that intragastric electrization was capable of influencing peristalsis and secretion, he was unable experimentally to induce in animals contraction of the stomach by direct application of the electrodes to the exposed stomach.

DR. A. JACOBI, of New York City, stated that he had

faithfully and persistently employed electricity in the treatment of chronic constipation and in conditions of dilatation and atony of the colon, but had failed to obtain encouraging results.

DR. MELTZER added that his experiments had shown the danger of stimulating the bowel by electricity with one electrode introduced into the rectum and the other placed upon the abdomen.

DR. W. P. NORTHRUP, of New York City, read a communication entitled

FORCIBLE ARTIFICIAL RESPIRATION—FELL-O'DWYER APPARATUS—CASES.

The apparatus consists essentially of a bellows, to be worked by foot and connected by means of rubber-tubing with a hard-rubber tube for introduction into the larynx. By this means air can be forced into the lungs rhythmically, with ordinary respiratory frequency and at the will of the operator. He cited a case of opium-poisoning, in which, by alternate artificial respiration with the apparatus exhibited and washing out of the stomach, death was averted.

The following officers were elected for the ensuing year: *President*—Dr. A. Jacobi. *Vice-President*—Dr. J. M. Da Costa. *Secretary*—Dr. Henry Hun. *Treasurer*—Dr. W. W. Johnston. *Recorder*—Dr. I. M. Hays. *Council*—Dr. George B. Shattuck. *Representative on Executive Committee*—Dr. William Osler. *Alternate*—Dr. M. A. Starr.

The following new members were elected: Dr. Henri A. Lafleur, of Montreal; Dr. Ira T. Van Gieson, of New York; Dr. Simon Flexner, of Baltimore; Dr. W. E. Fischel, of St. Louis; Dr. Frank Billings, of Chicago.

AMERICAN GYNECOLOGICAL SOCIETY.

Twentieth Annual Meeting, held in Baltimore, May 28, 29, and 30, 1895.

THE meeting was opened with a paper by DR. HOWARD A. KELLY, of Baltimore, on

RECENT URETERAL EXPERIENCE.

The various instruments which he has devised for the inspection of the bladder and the sounding of the ureters were exhibited and the value of such operations explained. Experience in this line of work was thought especially useful in the detection of various forms of disease connected with the renal pelvis, with stricture and abscess and dilatation of the ureters, and with certain inflammatory and other morbid conditions of the bladder and urethra, and as a means of differential diagnosis in various forms of disease in the abdominal cavity.

The paper was discussed by numerous gentlemen, the principal point developed being that to sound the ureters satisfactorily a strong light must be reflected into the bladder by the cystoscope. Without it the work would be unsatisfactory or even impossible.

DR. S. C. GORDON, of Portland, Me., read a paper on

HYSTERECTOMY FOR UTERINE FIBROIDS.

He referred to his advocacy of this operation three years ago before the American Medical Association, and again before the meeting of the American Gynecological Society two years ago. He believed that it is good prac-

tice to remove all uteri affected with fibroid tumors, no matter what their size might be, if they offered any probability of reducing the patient to a condition of invalidism. The difficulties of the operation are often due to delay in doing it, hence it is advisable that it be performed early in the history of the growth. The chief danger from the operation is from the loss of blood, which is practically the cause of shock. The well-known symptoms possible with such tumors were described. Dr. Gordon also laid stress upon the use of catgut as a suture-material, which he uses for all purposes except the suture of the abdominal wound.

DR. THOMAS ADDIS EMMET, of New York, read a paper on

THE USE OF TRACTION AND MORCELLATION FOR THE REMOVAL OF FIBROIDS.

He had practised this method for many years; his remarks were limited to the removal of submucous and interstitial fibroids of the uterus. He believed that the operation of hysterectomy is greatly abused, and earnestly urged that palliative measures should first be tried. If hemorrhage is the prominent symptom, it can usually be checked without resorting to the removal of the uterus. The subsequent history of women who had been subjected to hysterectomy would show a large number of invalids, though they might have a different series of symptoms from those for which the operation was performed. For himself he would not feel justified in removing the uterus for fibroid tumor except with the view of saving life. He was aware that the developmental history of such tumors differed materially. If the development were rapid, there should be no hesitation in removing the organ. He thought the tendency to deny that retrogressive changes of a benign character frequently followed the menopause was not based upon fact. With regard to the removal of the growth by traction it was comparable to removing a substance from a mass of India-rubber, the latter contracting as the substance was removed. The use of ergot in the treatment of such tumors was condemned. The traction should in some cases be direct and in others lateral or rotatory, according to the resistance offered. If the density of the tumor were greater than that of the uterus, the operation would be thereby facilitated. In other cases, the tissue being similar to the structure of the uterus, its removal was sometimes followed by sloughing and sepsis. Dilatation preliminary to the operation on the uterine canal was a necessity. If sponge-tents could be aseptically prepared, they would furnish an ideal dilating agent. He had observed that multiparous women suffered from fibroid tumors to a greater extent than those who had not borne children, and that the growths were frequently modified in the course of gestation.

The discussion of the two foregoing papers, which was long and animated, was opened by DR. W. M. POLK, of New York. He differed with Dr. Emmet in regard to his views of the significance of fibroid tumors. It is possible that in the majority of cases bad symptoms do not occur, but they certainly do occur in many cases. If the treatment of this condition by hysterectomy had led to mistakes, it is but the history of every great surgical procedure which had ever been advocated. Personally he was much in favor of attacking these tumors by the vaginal route, though not in all cases. He

urged upon all operators a careful consideration of that method.

DR. J. M. BALDY, of Philadelphia, thought that the objectionable symptoms following hysterectomy, which had been alluded to, were usually quite susceptible of relief. If an operation upon a fibroid tumor were delayed, it sometimes happened that removal was rendered impossible.

DR. P. F. MUNDÉ, of New York, stood by the statements which he had made in the past, that the uterus should not be removed unless the conditions indicating it were of sufficient gravity.

DR. SUTTON, of Pittsburg, thought it important in considering the question at issue to remember that the indications and the possible results vary according as the tumor to be removed was a myoma or a fibroma, the life-conditions of the two forms of growth being entirely different. The social condition of the woman was also an important factor, a woman who was dependent upon her own exertions for a living often requiring an operation, which might be deferred when the surroundings were less exacting.

DR. MONTGOMERY, of Philadelphia, believed that the truth as to the desirability and necessity of operating upon fibroid tumors lay between the two extremes which had been enunciated in the respective papers.

DR. ENGELMANN, of St. Louis, Mo., believed that all methods of treating fibroid tumors could show a percentage of cures. No method was perfect and none was entirely without merit.

DR. GOFFE, of New York, thought it important to consider the age of a patient in relation to a possible operation. Those who were near the age of the menopause would offer the best chances of success, other things being equal.

DR. A. MACLAREN, of St. Paul, Minn., read a brief paper on

THE LIGATION OF THE PEDICLE WITH CATGUT.

His plea was for the innocuousness of catgut if it were properly prepared. The method which he advocated is by steam and dry sterilizing, a sufficiently high temperature being used and sufficiently long to destroy germs, but also without making the substance brittle. Infection by means of silk ligature-material was not uncommon, even though the material were aseptic when applied to the tissues. In non-suppurative cases he had met with no mishap from using catgut prepared by the method advocated.

DR. A. LAPHORN SMITH, of Montreal, Can., narrated his experience with

VENTRO-FIXATION AND ALEXANDER'S OPERATION.

The latter method is not adapted to cases in which adhesions were present. In other cases it is safe and useful. Accidents that are possible after its use are hernia and suppuration, and even death has been known to result. Inability to find the round ligaments is not an uncommon mishap, even with experienced operators.

Ventro-fixation might be a serious operation if pyosalpinx be present. It might be so performed as not to interfere with a coexistent pregnancy. In performing this operation he is accustomed to scarify a small area of peritoneal surface, which is to be attached to the

parietal peritoneum, and then introduce two sutures which are to be left permanently.

There followed a paper by DR. C. CLEVELAND, of New York, on

ALEXANDER'S OPERATION,

which he thought one of the most beneficent ever devised. It is indeed sometimes difficult to find the round ligaments, especially for beginners. The operation is practically without danger. It might usually be done with safety upon the pregnant woman. After parturition an examination should always be made of those who have been subjected to this operation, and it may be necessary to support the uterus for a few weeks with a pessary. The charge that the operation is unscientific is groundless, as the uterus is placed in a position which is anatomically correct. Unsuccessful operations are usually due to imperfect technique. It is desirable that a beginner should first perform the operation upon the cadaver. At least four inches of the ligaments should, as a rule, be drawn out and cut off, or secured under the skin, according to the operator's fancy. Too many stitches should not be carried through the stump which remains or its vitality may be destroyed.

The discussion on the two foregoing papers was opened by DR. F. H. DAVENPORT, of Boston, Mass. The question of the propriety of one or the other of these operations was, he said, not under discussion. The indications for them are limited. The relief obtained by them, in many cases at least, is limited, and could be obtained as well with a pessary. Ventro-fixation seemed to him the preferable operation of the two, especially if adhesions bound the retroflexed uterus down. The pathologic condition is not invariably due to a laxity of the round ligaments, but to a lesion of the cervix or the broad or utero-sacral ligaments. The round ligaments are not usually strong enough to sustain the weight of the uterus if it were very much enlarged. The operation recently recommended of vagino-fixation might solve the problem which is imperfectly solved by the other two.

DR. VAN DE WARKER, of Syracuse, N. Y., thought the use of the stem pessary would obviate many of the operations now performed for retroflexion. He thought the principle of Alexander's operation unscientific. It did not hold the uterus in anteversion.

DR. COE, of New York, said that Alexander's operation was not intended to suspend the uterus, and hence the operation was not adapted for cases of prolapse. In suitable cases of retroflexion it does bring the uterus sufficiently forward to enable it to functionate properly. It was also a means for the relief of prolapse of the ovaries.

DR. T. A. EMMET said it is the prolapse of the uterus with the disturbance of its bloodvessels, especially the veins, which is the cause of trouble in retroflexed uteri, not the retroflexion *per se*, which is only a symptom. Alexander's operation would not remove the source of the trouble, while ventro-fixation is still less scientific and only guesswork.

DR. W. M. POLK, of New York, declared that the results of these operations, not theories as to the causes of the lesions, should be the test of their value. Alexander's operation had well stood that test. It might be preceded by vaginal incision in cases in which adhe-

sions were present, the adhesions being broken up with the finger, Alexander's operation then being done in preference to ventro-fixation.

DR. J. M. BALDY preferred ventro-fixation to Alexander's operation, since it gave one an opportunity to determine positively whether adhesions were present. They were frequently present when unsuspected.

DR. EDEBOHLS, of New York, discussed Alexander's operation compared with operations on or in the vagina for the relief of uterine displacements. He had performed Freund's operation five times in the last fifteen months with three successes. In Alexander's operation it is true that the round ligament did not always run through the inguinal canal. In two cases he had traced its course upward and outward from the internal ring to its distribution between the external and internal oblique muscles.

DR. J. M. BALDY, of Philadelphia, read a paper on

ABDOMINAL SECTION FOR PUERPERAL SEPTICEMIA.

Cases were narrated in which either the uterus or the appendages, or both, had been removed early in the history of puerperal septicemia, with satisfactory results. If an operation is to be done, it should be within the first week after confinement, especially if the tubes were infected and if the uterus were to be removed. If there were no pus, or if the diagnosis were doubtful, it might be warrantable to delay the operation until the symptoms became more definite. If an operation is done in the presence of general peritonitis, the operation would almost certainly be fatal. In general, the more localized the lesion, and the earlier the operation, the better will be the result. It is not easy to determine when septic saturation has occurred. If hysterectomy is to be performed, it should be within a week after confinement. Nineteen hysterectomies had been reported, seven of them being successful.

DR. F. HENROTIN, of Chicago, advocated a conservative course in the treatment of puerperal septicemia.

DR. W. G. WYLIE, of New York, spoke of the difficulties of diagnosis in this disease. If peritonitis were general, incision of the vagina, with drainage, would in some cases result successfully. In the early stages of the disease irrigation of the uterus every hour would check its progress.

DR. A. F. CURRIER, of New York, excluded from consideration at that time two classes of cases—those in which septic peritonitis was general and those in which the inflammatory products were extra-peritoneal. In the former he believed an abdominal section would always result fatally, in spite of published reports to the contrary; in the latter the same operation would usually be successful. The remaining cases included mainly those in which the uterus and adnexa were involved, with or without suppuration. As a rule, these cases were not seen by the gynecologist until after the first week, and to add the shock of an operation to the already greatly prostrated condition offered little hope of success, especially if the uterus were to be removed. Vaginal incision, or even vaginal hysterectomy, might succeed in some cases, with the superior opportunity which it gives for drainage. It must be remembered that a certain percentage of cases would get well anyway, if left alone, without operation.

DR. C. P. NOBLE, of Philadelphia, thought hys-

terectomy offered prospects of success if performed very early. The longer it is delayed the less hopeful would the operation be.

DR. A. L. SMITH, of Montreal, Canada, believed that the gynecologist is powerless in general peritonitis. When infection through the uterus is beginning it might be warrantable to bring the uterus and adnexa out, and secure them outside the wound with a *serre-neud*, without removing them at once, thus saving time and possibly shock. He had so operated with success in one case.

The address of the President, DR. M. D. MANN, of Buffalo, reviewed the condition of a large number of women with whom neurasthenia is probably more potent as a cause of illness than pelvic disease. With such women the condition of the kidneys is an important matter for consideration. While not seriously diseased, they are functionally defective. The matter of dress-reform also occupied a large share of his attention, the necessity for hygienic changes in this respect being considered very great.

DR. J. H. ETHERIDGE, of Chicago, read a paper entitled

RENAL INSUFFICIENCY IN GYNECOLOGICAL CASES.

This condition is observable in many cases, though there might be no serious renal lesion. Retention of urine is followed by absorption of poisons with general intoxication, especially with retention of urea and the development of pleurisy and other diseases. A table of the urinary solids excreted by normal women of given weights had been calculated, from which abnormal excretions could be deduced. If less than seven-hundred grains of urinary solids were discharged per diem, it could be assumed that some abnormal process was present or was developing.

DR. A. J. C. SKENE, of Brooklyn, thought that an oversight of the general conditions in women who were to be subjected to operation is not infrequently the cause of bad results. Deranged nutrition and innervation are frequently the cause of bad symptoms in women rather than a slight degree of pelvic disease.

DR. H. A. KELLY, of Baltimore, illustrated the relation of renal insufficiency to the conditions which followed operations on the pelvic organs by a graphic diagram prepared from the post-operative history of twenty-one of his own cases. In this diagram it was seen that the volume of urine diminished to one-third its ordinary volume the day after the operation, then remained nearly constant for three days, and gradually increased to the normal by the tenth day. The volume of urinary solids remained practically the same, though the specific gravity of the urine was increased.

DR. W. E. FORD, of Utica, N. Y., thought the changes in the renal functions which were supposed to be due to pelvic disease are often attributable to nervous or emotional causes.

DR. BALDY believed that pelvic disease is usually the source of neurasthenia and renal disease in the cases under discussion.

DR. WYLIE recommended the free use of hot water by the rectum during or after operation as a preventive of shock and renal disturbance.

DR. BACHE EMMET, of New York, was in favor of careful supervision of the renal functions prior to operations.

DR. A. L. SMITH favored the use of large quantities of water by the mouth and rectum to wash out the excrementitious material with the urine.

DR. CHARLES JACOBS, of Brussels, Belgium, read a paper on

TOTAL EXTIRPATION OF THE UTERUS BY THE VAGINAL ROUTE.

He presented a table of four-hundred-and-three cases in which he had operated, with twelve deaths. The indications for the operation are carcinoma, fibroid tumor, extra-uterine pregnancy, suppurative disease of the appendages, non-suppurative disease of the appendages, prolapse of the uterus and vagina, and disease of the uterus following abdominal operations. Tables of cases for the various indications were given. The indications in some cases were relative and not absolute, especially with the prolapsus. Of the accidents that followed the operation, there were fistulae in nine cases, five of them intestinal, three vesical, and one ureteral. The importance of suitable instruments for the vaginal operation is supreme, especially instruments for hemostasis. In twenty-one cases it had been impossible to remove all the diseased tissue, but no bad result followed such incomplete operations.

DR. W. H. WATHEN, of Louisville, Ky., read a paper on

VAGINAL HYSTERECTOMY FOR UTERINE MYOMATA AND DISEASES OF THE ADNEXA; ALSO FOR CYSTIC AND SOLID TUMORS OF THE UTERUS.

Extracts from personal communications from Péan and Richelot were read advocating the operation on the basis of their extensive and successful experience. It is always possible to complete this operation by abdominal incision if the vaginal route prove impracticable. The technical difficulties by the vaginal method are not greater than in the severer cases by the abdominal, and the drainage is better. The arguments for the removal of the uterus in those cases in which the adnexa required removal are greater rapidity of recovery, freedom from suppuration and hernia, and a lower mortality-rate. Success depends on the use of suitable instruments, on not wounding the viscera, and in preventing hemorrhage.

DR. F. HENROTIN, of Chicago, read a paper on

THE CONSERVATIVE SURGICAL TREATMENT OF SEPTIC PELVIC DISEASE.

He believes there is too much surgery of the female pelvic organs, though he is not in favor of retaining the uterus if the adnexa require removal, on the ground that the cure would be more complete and that the time for sentiment had passed with the removal of the ovaries. He believes that the drainage of collections of pus in the uterus, tubes, and parametrium could usually be effected without the performance of a serious operation. His proposition consists in making a horizontal incision high up on the posterior wall of the *portio vaginalis*, then a vertical incision backward from its middle point, and through this opening to insert the finger, pushing it upward between the layers of the broad ligament, thus palpating the entire area in which pelvic disease usually began. Evil consequences could thus be anticipated, abscesses could be broken up, also masses of induration.

The time to cure pelvic disease is in its early stages. The art of the future would consist in accurate diagnosis and early treatment.

DR. R. S. SUTTON, of Pittsburg, exhibited specimens of uteri with tumors attached, some of which had been removed by vaginal and others by abdominal incision. In two there was pregnancy at the third month. In several malignant disease was discovered after the removal of the uterus.

DR. MONTGOMERY, of Philadelphia, opened the discussion on the foregoing papers. He thought the statistics which had been narrated show the superiority of vaginal over abdominal hysterectomy. It is also of great value for diagnostic purposes. For ectopic gestation he would still prefer the abdominal route, also in some cases for fibroid tumors of the uterus.

DR. BALDY thought the objections to the scar and to the possibility of hernia after abdominal hysterectomy are valid, but he would not consider it prudent in any case to allow a patient to get up from her bed within a week after operation, as had been frequently reported after vaginal hysterectomy. He believed that the difficulties and dangers of the vaginal are greater than those of the abdominal operation; it would frequently be impossible to complete the vaginal operation, and it requires a longer time for its performance. What could be done safely by the vagina could be done with equal safety by the abdomen.

DR. POLK admitted that those who are skilful in abdominal work could best do the vaginal operation. The latter is certainly the more difficult. The simple vaginal incision which had been advocated is a most valuable suggestion, and would do away with much of the prolonged treatment of pelvic disease. An incision on the anterior vaginal wall would prove more serviceable in many cases than one on the posterior wall. Especially would it better enable one to examine the condition of the ovaries and tubes.

DR. GORDON is not favorably impressed with the plan of operating from below. He prefers the route which enables him to see as well as to touch the diseased tissues.

DR. WYLIE believes that routine practice is not desirable by either method. The conditions present should determine the method of treatment. The vaginal method is certainly the more difficult if the adhesions are high up. The question as to the proper route for removing the uterus is by no means settled.

DR. J. E. JANVRIN, of New York, thinks that with reference to removal of the uterus for carcinoma the vaginal route is preferable. If it could not be so removed, its removal is not usually indicated.

DR. McMONIGAL, of San Francisco, Cal., is not in favor of removing the uterus and tubes if there is merely inflammation without suppuration. As to the vaginal method, it would be difficult to induce those to change who were already securing satisfactory results by the abdominal method.

DR. W. T. LUSK, of New York, referred to the question of tubal pregnancy in its relation to vaginal hysterectomy, and reminded his hearers that the uterus and the unimpregnated tube are frequently healthy, and it would therefore be unjust to remove them. It should not be forgotten that in changing from the abdominal to the vaginal method patients are being exposed by the

operators to greater risk to life while the method was being learned.

DR. T. A. REAMY, of Cincinnati, O., read a paper on

THE TREATMENT OF PUERPERAL ECLAMPSIA.

Notes of a series of cases were read in which various methods of treatment were used, but that upon which greatest stress was laid consisted in the use of large doses of tincture of veratrum viride, either hypodermically or by the mouth. With Dr. Reamy such treatment had been almost universally successful.

DR. E. P. DAVIS, of Philadelphia, read a paper on

THE PROPHYLAXIS AND TREATMENT OF ECLAMPSIA.

He considered mania and toxemia among the important precursors of eclampsia. The latter is due to imperfect renal function with retention of urinary solids. Patients with impending eclampsia also showed malaise and feeble pulse. With rest and increased urinary excretion it would be probable that the eclampsia was being averted. Sedatives and laxatives were indicated as medicinal measures; also the rapid emptying of the uterus at the earliest possible moment. Such cases emphasized the necessity of studying the condition of pregnant women before the period of gestation was terminated.

DR. LUSK believed that with puerperal eclampsia the uterus should be emptied as soon as possible. It is also desirable that the anesthesia should not be prolonged. This method is preferable to the use of drugs of whatever character. Dürhssen's plan of deeply incising the cervix to favor dilatation is sometimes useful in hastening the delivery. Kreatin and kreatinin are now believed to be the agents that cause the convulsions.

DR. A. L. SMITH thought that in addition to the early emptying of the uterus it is well also to use chloral by the rectum, then anesthetizing with the A.-C.-E. mixture. Subsequently he would stimulate the kidneys and skin with large drafts of water.

DR. ENGELMANN laid stress upon the value of great care of the pregnant woman during the early months.

DR. MANN also favored the stimulation of the kidneys with an abundance of water. He had also had very satisfactory experience with veratrum viride.

DR. W. E. FORD, of Utica, N. Y., read a paper on

THE ULTIMATE RESULTS OF TRACHELORRHAPHY.

Much had been written concerning the influence of trachelorrhaphy upon nervous disease. His idea is that reflex nervous disease produced by a lacerated cervix is a very vague term. The pains in parts of the body remote from the lesion are not reflected but transferred. Nervous disease is improved by trachelorrhaphy only because the general health is improved, and it is an observed fact that in some cases of nervous disease the patients become worse after the operation. That pronounced relief to nervous disease follows the operation is not often justified by facts. In 136 cases in which he had studied the remote results they had been disappointing in the majority of cases. Recoveries from neurasthenia were not more frequent than in an equal number of cases in which no operation had been performed.

DR. CLEVELAND thought that mistakes are often made in trachelorrhaphy by removing only the indurated tissue

in the angles of the lacerations. If there is cystic degeneration, the degenerated tissue should also be removed, and it would in some cases be better to amputate the entire *portio vaginalis*.

DR. ENGELMANN did not agree with the statements made concerning reflexes; he thought reflex neuroses certainly proceed from uterine lesions. He also thought that amputation is frequently preferable to trachelorrhaphy.

DR. CURRIER thought that the results of trachelorrhaphy would be governed by the condition for which the operation was performed. In one class of cases the lesion is mainly emotional, and it is a matter for each one to decide whether he would operate upon such cases. In the other class of cases there is morbid tissue which acts as a focus of irritation. Removing this tissue removes the focus of irritation, improves the nutrition of the tissues, and tends to produce remote effects upon other morbid conditions of the body.

DR. A. P. DUDLEY seldom found the operation necessary now, the patient's condition being usually susceptible of relief by other measures.

DR. GORDON thought that dilatation and curettage usually obviated the necessity of trachelorrhaphy. He had practically abandoned it.

DR. GEORGE HARRISON, of New York, believed the operation was one of the most beneficent, though it was often abused.

DR. HOLMES, of Portland, Ore., thought that even small lacerations had so decided an effect upon nutrition that their operative treatment was frequently of great benefit.

CORRESPONDENCE.

THIRTIETH ANNUAL MEETING OF THE MICHIGAN STATE MEDICAL SOCIETY.

THE Michigan State Medical Society held its thirtieth annual meeting in Bay City, Mich., June 6 and 7, 1895, under the presidency of Dr. H. O. Walker.

The attendance was representative in character and equal to the average in numbers. The local committee had made abundant provision for the convenience of the members, and with tireless endeavor promoted cordial good-will, so that the meeting was without friction in any respect.

It was gratifying to have its committee report the enactment by the State Legislature of a law to prevent blindness by compelling attention to the purulent ophthalmia of the newborn. But it was sadly disappointing to learn from other committees that the bill to regulate the practice of medicine failed to become a law after the manner of many previous attempts, and that the bill to secure a registration of births and deaths in accordance with a common-sense method had also failed to become a law. Michigan, by deliberate act of its Legislature, still remains the dumping-ground of the world's incompetent and dishonest doctors. It made a notable change in its requirements for membership in that it admitted two physicians whose entire medical education was obtained in homeopathic medical colleges. It was stated by a member upon the floor of the House that such action was contrary to the code of ethics, so that the action was taken deliberately and with full knowl-

edge of the facts. Thus this Society "drifts" from its old-time allegiance, a fact more noteworthy in that last year it refused to entertain the idea of changing the code of ethics in any particular.

The scientific work of the Society is done in three sections. These were all well attended, the papers of scientific and practical interest and intelligently discussed. As the papers numbered fifty, it will be apparent that the sessions of two days and one night were needful in order that the work be accomplished.

The arrangement of the first session of each of the sections was peculiar in that it was devoted to the consideration of a series of papers discussing different phases of a single topic; thus the surgical section discussed urethral surgery; the medical section, diphtheria and its antitoxin; the gynecologic section, malignant diseases of the uterus. The papers prepared for these several discussions were of unusual merit. The remaining sessions of the sections were devoted to papers on widely diverse subjects, usually embodying original studies or original research, and of such general attraction as to hold the members in attendance till time for final adjournment. Since the organization of these sections this Society has been singularly free from disagreeable "wire-pulling" and disagreeable episodes. Among the reasons for this delightful change from former days are:

1. There is nearly four times the amount of work called for, which engages at least four times as many physicians. This consumes the surplus energy, so that less is left for less useful purposes.
2. There are four times as many officers, so that the desire for office-holding is more largely appeased, and hence the diminished struggle for such positions.
3. An atmosphere of scientific study and work is created of far greater intensity, and this represses much that is undesirable and which was associated with the old style medical convention.
4. Engaged in actual work constantly to a number threefold more than formerly, the members have found a pleasure and satisfaction hitherto unknown.
5. Each member had a chance to select one of three papers or discussions at any time during the meetings—so that he had a chance to select topics hitherto unavailable.
6. The papers have become more scientific, and were prepared with greater care, because the selected audience had a chance to criticize more intelligently, and by its very selectness was better able to criticize.

It must be admitted that this new state of things is unsatisfactory to the friends of the old medical convention. These prefer a chance to talk to a large crowd—to have a less discriminating audience, to shut off others from a chance to learn the art of public speaking in medical societies. They do not enjoy the highest grade of scientific work. However, it is hoped by the majority of thoughtful workers in the Michigan medical profession that the present system may be continued and perfected.

Mount Clemens was selected as the next place of meeting, and the first Thursday in June, 1896, as the date for holding the same. The newly elected officers are as follows: President, Victor C. Vaughan, Ann Arbor; First Vice President, Hugh McColl, Lapeer; Second Vice President, R. W. Erwin, Bay City; Third Vice President, F. B. Tibals, Detroit; Fourth Vice Pres-

ident, F. G. Novy, Ann Arbor; Secretary, C. H. Johnson, Grand Rapids; Treasurer, W. G. Henry, Detroit; Members of the Judicial Council, H. B. Baker, Lansing; Francis A. Rutherford, Grand Rapids, and W. T. Dodge, Big Rapids.

The officers of the sections are: Medicine: Chairman, David F. Stowe, Bay City; Secretary, A. P. Biddle, Detroit; Orator, H. M. King, Grand Rapids.

Surgery: Chairman, D. M. Greene, Grand Rapids; Secretary, A. F. Bulson, Jackson; Orator, C. H. Baker, Bay City, Mich.

Gynecology: Chairman, F. G. Minor, Bay City; Secretary, J. B. Winnery, Grand Rapids; Orator, Reuben Peterson, Grand Rapids.

REMARKS ON A RECENT SURGICAL FAD.

Castration for Hypertrophy of the Prostate.

To the Editor of THE MEDICAL NEWS,

SIR: Every now and then the medical profession has brought to its notice a new operative procedure for the relief of obstinate surgical diseases of various kinds, and long before it has been fairly tested it often becomes more or less of a surgical craze. Let the sanction of high surgical authority be ever so lukewarm, the rank and file of the profession seem to tumble over each other in their efforts to be the first to present a series of operations involving the new procedure. The oophorectomy-craze is on the wane, but it is still worthy of attention. The adoption of a surgical fad is dangerous in proportion to its simplicity and ease of performance, and it is by no means surprising that the new operation that has been suggested for hypertrophy of the prostate should be adopted by so many men of limited surgical experience. Castration is an operation so easy of performance, and so stubborn an affection is hypertrophy of the prostate, that the temptation to perform the operation—especially in view of the encouraging reports that have been published—is naturally great. I do not propose to quarrel with the accuracy of the experiments or the conclusions of my distinguished confrère, Dr. J. William White, of Philadelphia, who a short time since gave the results of his experimentations on dogs, and made the suggestion of the possible beneficial results that might be obtained from castration in enlarged prostate in the human subject. The avidity with which certain surgeons seized upon the straw held out to them by Dr. White was amusing. There appeared to be a desperate struggle to determine who should be the first to perform the operation or a series of operations of the kind suggested by Dr. White. Given a willing patient, castration was performed and the case rushed into print with a rapidity that was as entertaining as it was ridiculous. One gentleman, who, by the way, is one of my personal friends, and for whom I entertain a high regard, reported a case illustrating the success of the operation of castration for enlargement of the prostate in something like two weeks after the performance of the operation. It is hardly necessary to comment upon this case as a specimen of clap-trap clinical observation. Such clinical experiences are conducive to notoriety, it is true; but as far as their practical value as bearing upon the operation is concerned, they are absolutely worthless. A number of other cases of

equally fallacious clinical reports have appeared upon the medico-literary market from time to time. The tendency seems to be to adopt the new operation as a specific for prostatic hypertrophy with a total disregard as to the proper selection and differentiation of cases.

Much stress is laid upon the results of experiments upon the lower animals, it being claimed that the removal of one testicle will produce atrophy of the prostate in both animals and human beings. Excellent observers have noted apparent evidence in support of this view. Such reports, in my estimation, are to be received with a certain degree of caution. The normal prostate is by no means so easily outlined by the examining finger as some would have us believe, and a certain degree of skepticism is therefore warrantable in the consideration of cases in which the removal of one or both testicles has produced shrinkage of the normal organ. I am not going to quarrel specifically with reports of this kind, but I have had several patients under observation in which the experience of some of my colleagues is directly contradicted. I do not, however, accept my cases as conclusive, but am perfectly willing to admit that with increased facilities for observation the character and weight of evidence may be changed. I venture to report these cases on account of their suggestiveness.

CASE I was that of a young gentleman, twenty-eight years of age, suffering from chronic traumatic orchitis that had destroyed the function of the right testicle at the age of five years. A small hydrocele with extremely thickened walls was present. The tumor was very large, and as the testicle was evidently out of service, and extremely objectionable on account of its weight, I suggested an operation. The testicle was removed, and the patient has been seen from time to time during two years past. He had gonorrhea shortly after the removal of the testicle, and a subsequent follicular prostatitis with epididymitis of the remaining testis. The prostate was somewhat enlarged, as a consequence of the follicular inflammation. The enlargement has subsided, but the organ is still larger than normal.

CASE II was that of a gentleman, forty-five years of age, a monorchid, whom I treated for stricture and vesical inflammation. This patient has a prostate distinctly larger than the normal average.

CASE III was that of a gentleman, fifty years of age, who consulted me regarding chronic prostatitis with considerable prostatic enlargement, which had begun some months previously. On examination of this patient I was interested to note that he had but one testicle. On inquiry he stated that the absent member was lost through an injury received in the late war.

CASE IV. This man, thirty years of age, consulted me regarding a chronic prostatorrhea which he believed was incidental to masturbation in boyhood. One testicle had been lost by injury at the age of sixteen. The prostate in this case was tender. There was a history of slight stricture which had been treated some years before.

It may be objected that these cases have no direct bearing upon the effect of castration upon the normal prostate. It must be remembered, however, that these cases are a fair illustration of what exists in the early stages of a great many cases of enlarged prostate. More than this, they typify the condition existing in the incipient stage of a certain proportion of cases of pros-

tatic hypertrophy—at a time when the best effect would be expected from castration if all that is claimed for the operation is true. In the case of the cryptorchid, the objection might be raised that the testicle which was apparently absent was retained within the abdomen, and was functioning with sufficient activity to preserve the physiologic integrity of the prostate. It is to be remembered, however, that in the case of cryptorchidism there is something more to be considered than the mere absence of the testes from the scrotum. Retained testes are always degenerate, and the imperfect development of retained testes should certainly have an effect upon the prostate, judging by the reported results of castration. It would seem, furthermore, that a more pronounced effect would be produced upon the prostate through coincidental failure of development of that organ.

I am prepared to accept the statement that castration relieves a certain proportion of cases of prostatic enlargement. I believe, however, that in the most typical forms of prostatic hypertrophy castration is not likely to accomplish any marked effect. There are cases, for example, in which much of the trouble experienced by the afflicted individual is due to a large quantity of residual urine. Shrinkage of the enlarged prostate in these cases is not likely to produce any very beneficial results, because the bladder-walls have become so changed by disease that no method of treatment short of cystotomy will bring about the bladder-drainage necessary to a cure or even marked relief. In those cases of prostatic hypertrophy in which distinct circumscribed fibro-adenomatous tumors exist about the neck of the bladder it does not seem reasonable to expect much from castration. The cases in which it is most likely to be beneficial are in relatively young subjects in whom the activity of the gland and its nerve-supply is still well marked. In those cases in which the prostatic enlargement is, so to speak, incipient, the overgrowth is soft and is likely to be benefitted by measures of treatment less severe than castration. Chronic inflammation and hyperplasia will express as nearly as anything the condition of the prostate in these cases. Prostatic massage, with measures to allay irritability of the deep urethra—i. e., the true vesical neck—is likely to prove of great value in these cases.

One thing is certain, that in individuals with active sexual desire and normal potency castration is by no means to be thought of. I know of no rational operation upon the bladder and prostate which is not more justifiable. Some of my over-enthusiastic surgical brethren are likely to get themselves into very hot water if they do not exhibit more caution and conservatism in handling prostatic hypertrophy than seems to be the tendency in certain quarters. Within the last week I have been consulted by a gentleman, fifty years of age, who enjoys the fullest sexual vigor, but who has a moderately enlarged prostate with frequency of urination, but with little or no residual urine. Several surgeons have advised this gentleman to submit to the operation of castration. I take this opportunity of interposing a strenuous objection to such operative procedures in cases of this kind. I do not believe that castration is warrantable as long as the individual retains his virility. This restricts the operation to a very limited field, inasmuch as the testes become more orna-

mental than useful at a rather late period.¹ Sooner or later some surgeon will get himself into serious trouble through having castrated a man for enlargement of the prostate. The patient who, in the presence of keen suffering, is likely to disregard the loss of his testicles, is also quite likely to experience a sufficient amount of regret after his sufferings have been relieved, to consider the question of malpractice, and when the existence of other and more logical operations for the relief of the symptoms incidental to hypertrophy of the prostate are taken into consideration, the sympathy of the average jury is liable to result disastrously to the surgeon.

It is my opinion, that the operation of castration for hypertrophy of the prostate should be advised only in men in whom the sexual function has either become abolished or so nearly so that the testes have become useless appendages. The operation is safer than operations upon the prostate, but no safer than suprapubic cystotomy, if properly performed. Indeed, the danger in the two operations is almost identical, inasmuch as it is the anesthetic, rather than the operation *per se*, that threatens life. Should it be shown, by further experience, that the operation of castration may be relied upon for relief in the larger proportion of advanced cases, it will then be warrantable to perform the operation of castration as the preliminary procedure. Should the operation fail, then suprapubic cystotomy is to be performed. In many of these advanced cases the indication for vesical drainage is likely to be so marked that the operation of castration will not be worthy of consideration. If the patient has to live but a short time, and his life is menaced by inflammation and sepsis, suprapubic cystotomy, prolonged drainage, and frequent irrigation would seem to be much more logical than castration.

It must be admitted that the operation of castration for hypertrophy of the prostate is still in its experimental stage, and I venture the opinion that what the procedure most needs is to be saved from its friends. Surgical "itch" and cupidity are likely seriously to cripple the future of an operation that certainly has a certain degree of promise.

As far as my own conservatism is concerned, I am ready to become radical in the application of the operation to appropriate cases as soon as sufficient evidence has been accumulated by competent observers. I certainly will not accept as competent those observers who report cases within a few weeks after the operation, when, as a matter of fact, the rest necessitated by the operation, the sedative effect of the anesthetic, and the duty incidental to the after-care of the case, may be mainly responsible for the benefit of the operation. I wish to know, moreover, that the results are permanent in a large proportion of cases. At one time I firmly believed that suprapubic cystotomy would permanently cure a large proportion of cases of enlarged prostate. I found that during the prolonged drainage after an oper-

¹ I recall an incident in my own practice suggestive of the truth of this statement. A gentleman, seventy years of age, consulted me for enlargement of the prostate. I incidentally mentioned the new operation for the relief of that condition. The old gentleman amused me greatly by remarking that while "that operation might do for real old men," he would have "none of it." He expatiated sufficiently to convince me that his testes were by no means useless appendages.

ation the enlargement of the prostate subsided very rapidly.

With reference to the speedy resolution of the prostate, claimed to result after castration, I note that I have observed a similar apparent resolution of the disease-process within one week after suprapubic cystotomy and drainage; yet in the larger percentage of instances I have found that suprapubic cystotomy was by no means a permanent cure in the cases of more pronounced prostatic enlargement. In younger subjects, suprapubic drainage will invariably, in my experience, bring about a subsidence of the prostatic enlargement, which in many cases will remain permanent. When circumscribed tumors exist, however, and in cases in which the prostatic enlargement is firmly organized, such a result is not to be anticipated.

In conclusion, I will state as my own belief regarding the surgery of the prostate, that the radical operations of prostatotomy and prostatectomy at an early period of the disease are not performed with sufficient frequency. If patients of middle age were given to understand distinctly that their prostatic disease is bound to grow worse instead of better, and an operation was suggested at an earlier period, we would hear less of the incurability of prostatic hypertrophy.

Very sincerely yours,

G. FRANK LYDSTON.

815 RELIANCE BUILDING, CHICAGO, ILL.

IN FAVOR OF THE FOUR-YEAR COURSE OF STUDY.

To the Editor of THE MEDICAL NEWS,

SIR: Permit me to say a word in regard to the Woman's Medical College of Baltimore. It has never lagged behind in any movement for the betterment of the medical colleges and of medical education in this country. It is well known here that it has led the way in the reforms that have been introduced from time to time in this city. It cordially accepts the recent decision of the American College Association (the inception of which, by the way, is due to a member of its Faculty), and regards the matter as definitely settled, once for all. At the very first meeting of its Trustees after this decision a resolution to adopt a four-year course was passed without the least evidence of dissent. I may say, however, that even before the adoption of the four-year course by the College Association, in May, 1894, the Trustees of this college had voted to lengthen its annual term to eight months; that for thirteen years we have had a seven-months' term and for eleven years a three-year course. With regard to the other colleges here, I may say that I believe that they will accept the lengthened term as heartily as we have done.

Yours very truly, EUGENE F. CORDELL, M.D.,

For Trustees of the Woman's Medical College.
BALTIMORE, Md.

NEWS ITEMS.

The Medical Society of New Jersey will hold its one-hundred-and-twenty-ninth annual meeting at Cape May, N. J., on June 25 and 26, 1895. Among the papers to be read are the following: Annual Address by the President, O. H. Sproul, Diseases of Pregnancy and Parturi-

tion; Some Original Investigations, Showing the Antagonism Between Morphin and Cocain, by J. W. Stickler. Discussion: The Practice of the *Journal of the American Medical Association* in Advertising Secret Nostrums; Comparative Advantages of Water, Hot or Cold, versus Germicidal Solutions in Modern Surgery; Essay: Third Vice-President D. C. English, Our State Medical Society, Its Past Success, Present Needs, and Future Prosperity.

State Medical Examinations in Virginia.—

Applicants from Philadelphia Medical Colleges for license to practise before the Medical Examining Board of Virginia, from Jan. 1885, to Oct. 1894.	No. of applicants.	No. licensed 1st examination.	No. rejected 1st examination.	No. licensed 2d examination.	No. rejected 2d examination.	No. rejected 3d examination.	Incomplete or withdrew.
Jefferson Medical College	34	24	9	2	...	...	1
Jefferson Medical College and Baltimore Med. Coll.	1	...	1	...	...	...	...
Jefferson Medical College and University of Virginia	1	1	...	...	...	...	...
Medico-Chirurgical College	1	...	1	...	1	1	...
University of Pennsylvania	9	9	...	...	...	...	...
Woman's Medical College	2	2	...	...	...	...	...

Applicants from Philadelphia Medical Colleges for license to practise medicine before the Medical Examining Board of Virginia, May 8 and 9, 1895.

	Number of applicants.	Number licensed.	Number rejected.
Baltimore Medical College and Jefferson Med. Coll.	1	...	1
Jefferson Medical College	3	2	1
University of Pennsylvania	1	1	...

The Practitioner is far better in name than in name. Under the able editorial management of its new editor, Mr. Malcolm Morris, it is taking a new and higher rank among English medical journals. A distinguishing feature is the *Medico-literary Causerie*, the excellent writer of which seems to be pre-empting a somewhat untitled field—the relations of the profession and general literature.

Dr. Theobald Smith, formerly Chief of the Division of Animal Pathology in the United States Bureau of Agriculture, has been made Bacteriologist to the Massachusetts State Board of Health and Professor of Applied Zoology in the Bussey Institute of Harvard University.

Medical Legislation in New Mexico.—An act to regulate the practice of medicine and to establish a Territorial Board of Health has been approved by the Governor of New Mexico.

At the Johns Hopkins University Dr. Simon Flexner has been advanced to Associate Professor of Pathology and Dr. William S. Thayer to Associate in Medicine.

Dr. Francis H. Davenport has been made Assistant Professor of Gynecology in the Harvard Medical School.

Dr. Harold C. Ernst has been made Professor of Bacteriology in the Harvard Medical School.